1925

AND

SURVEY REPORT

FOR THE LAST 5 YEARS, 1921-25.

REPORT

ON

THE HEALTH

OF THE

HESTON & ISLEWORTH URBAN DISTRICT

FOR THE YEAR 1925.

BY

ELWIN H. T. NASH,
M.R.C.S., L.R.C.P., D.P.H.
MEDICAL OFFICER OF HEALTH.

PUBLIC HEALTH DEPARTMENT,

COUNCIL HOUSE HOUNSLOW.

1926.

To the Chairman and Members of the Heston and Isleworth Urban District Council.

GENTLEMEN,

The Annual report this year is designated by the Ministry as a Survey report, for the purpose of making a general survey of the conditions of the district during the last five years.

The outstanding matters affecting the health of the district during the last five years have been :—

1. The continuance of repeated small crops of notifications of cases of Encephalitis Lethargica.
2. The outbreak of Lead Poisoning due to Beer. (1922.)
3. The continued occurrence of Diphtheria in North Hyde Schools and its entire eradication after the Schick Testing and immunizing the inmates.

I beg to express my appreciation to the Council for the consideration shewn to me during the past twelve months.

I am, Gentlemen,

Your obedient servant,

ELWIN H. T. NASH,

Medical Officer of Health.

THE HEALTH COMMITTEE

OF

HESTON AND ISLEWORTH URBAN DISTRICT COUNCIL

FOR THE YEAR 1925.

Members of the Council:

A. E. HALES, ESQ. *(Chairman).*

J. J BONNETT, ESQ. O.B.E. *(Vice-Chairman).*

S. CARTER, ESQ. J.P. *ex-officio*
(Chairman of the Council).

A. L. LANG, ESQ. *ex-officio*
(Vice-Chairman of the Council).

F. W. BUCKLEY, ESQ.
C. CRUSH, ESQ. J.P.
A. DENNIS, ESQ.
C. J. GEARY, ESQ.
F. T. HART, ESQ.
E. W. HEATH, ESQ.
G. NEWELL, ESQ.
C. M. ROBINSON, ESQ.
N. L. SAMMELS, ESQ.

Medical Officer of Health:—
ELWIN H. T. NASH, D.P.H.

MATERNITY AND CHILD WELFARE COMMITTEE.

Members of the Council:

F. W. Buckley, Esq. *(Chairman).*

E. W. Heath, Esq.

A. L. Lang, Esq.

G. Newell, Esq.

C. M. Robinson, Esq.

N. L. Sammels, Esq.

Co-opted Members:

Mrs. C. W. Bezer.

Mrs. E. Chedgey.

STAFF.

The following persons constituted the Staff of the Health Department on the 31st December, 1925.

Medical Officer of Health—

Elwin H. T. Nash, M.R.C.S., L.R.C.P., D.P.H.

Assistant Medical Officer of Health—

Mrs. E. Louise Roberts, M.B., Ch.B., D.P.H.

Sanitary Inspector—

R. H. Butler, Cert. as S.I., M.I., and S.E.

District Sanitary Inspectors—

G. W. Ashworth, Cert. as S.I., and M.I.

E. W. Barton, Cert. as S.I., and M.I.

One vacancy.

Disinfector and Laboratory Attendant—

J. H. Cobb.

Health Visitors—

Mrs. C. E. M. Ottley, Cert. C.M.B., H.V. and S.N., M.C.W.W.

Miss B. N. Tetley, S.R.N., Cert. C.M.B.

Mrs. A. E. Tyrell, Cert. C.M.B., H.V. and S.N.

Miss W. E. Scott, S.R.N., Cert. C.M.B., H.V., S.N., M.C.W.W.

Miss B. G. Sorlie, S.R.N., Cert. C.M.B., Cert. R.S.I.

Home Help—

Mrs. E. Yates.

Chief Clerk—

B. W. Kilby, Cert. S.I.E.B. and R.S.I. (M.I.)

Clerks—

A. G. Hubbard.

Miss R. Marshall, Cert. R.S.I.

E. Cromwell.

J. Holmes.

NATURAL AND SOCIAL CONDITIONS OF THE AREA.

EXTRACTS FROM VITAL STATISTICS OF THE YEAR 1925.

Population—

At the Census, 1921	46,664	
Registrar-General's Estimate of nett ...	48,620	(Birth rate)
Civil population	48,350	(Death rate)

Births—	Male.	Female.	Total.
Legitimate	428	388	816
Illegitimate	20	12	32

Birth rate (nett) 17.44

Deaths—	Male	Female.	Total.
	267	266	533

Death rate (corrected) 10.26

Number of women dying in, or in consequence of, childbirth ... { from sepsis ... 3 / from other causes 3

Deaths of infants under one year of age per 1,000 births—

Legitimate ... 71.07 Illegitimate ... 125

Infantile Mortality Rate 73.11

Deaths from Measles (all ages) 1

„ „ Whooping Cough (all ages) ... 3

„ „ Diarrhoea (under 2 years of age) 12

Area ... ... 6,851 acres.

Number of inhabited houses (Census 1921) 8,790

„ of families or separate occupiers (1921) 9,893

Rateable value £269,344

Sum represented by a penny rate £958

Poor Law Relief.

I am indebted to Mr. F. E. Harmsworth, Clerk to the Brentford Guardians, for information respecting the amounts paid in money and kind as out-relief to poor persons within the Parishes of Heston and Isleworth during the years 1924—1925 :—

	1924.			1925.		
	£	s.	d.	£	s.	d.
Parish of Heston	2156	10	1	1996	6	3
Parish of Isleworth ...	4852	15	8	4759	11	6¾
	£7009	5	9	£6755	17	9¾

Medical Relief.

Particulars as to the extent to which hospitals and other forms of gratuitous medical relief are utilised are not available, save in a few instances, as many people apply to the hospitals outside the district, as for example, the Royal Hospital, Richmond, the West London Hospital, Hammersmith, and other General Hospitals within the Metropolitan area.

Poor Law Medical Relief.—The Relieving Officers issued 400 medical orders during 1925. Some of these cases received also out-relief and institutional treatment.

The Hounslow Hospital is the only voluntary Hospital within the district; it is a modern and well equipped institution which was enlarged by the addition of 20 beds in 1922, making a total of 52. Its sphere of usefulness has been extended by the provision of a children's ward. During the year 1925, there were admitted 576 in-patients, whilst 2,133 new out patients received treatment.

Medical relief is also given by certain voluntary organisations in the district, namely :—

The Isleworth District Nursing Association.

The Osterley, North Hounslow and Heston Nursing Association.

Curative Agencies directly or indirectly under the control of the Council will be referred to under their appropriate headings.

They include :—

Maternity and Child Welfare Clinics (two centres).

School Clinics (inspection and treatment of school children).

Hospital provision at Mogden and Dockwell for infectious diseases.

VITAL STATISTICS.

Population.

The Registrar-General's estimate for the population for 1925 is (Birth rate) 48,620—(Death rate) 48,350, despite the fact that our building activities for the last two years particularly have been

very large, the extent of which may be demonstrated by the fact that the amount of the loans under the Housing Acts at the end of 1925 amounted to £427,971. This estimate has a detrimental effect on all the vital statistics, in that they appear larger than they really should be owing to being based on a smaller population. This however cannot be avoided in intercensal periods as the figures throughout the Country must be taken on a uniform basis, and the fact that our housing activities are producing a large influx of population, does not appear in the figures supplied to us by the Registrar-General which are based on a definite mathematical basis used uniformally.

The estimates of the net civil population given under two figures supplied by the Registrar-General, for the years 1921—1925 are as follows :—

	1921	1922	1923	1924	1925
Death Rate ...	45,732	46,330	46,505	46,970	48,350
Birth Rate ...	47,290	47,850	48,030	47,700	48,620

The death-rate populations exclude all non-civilian males whether serving at home or abroad; whilst the birth-rate (and marriage-rate) populations include all the elements of the population contributing to the birth and marriage rates and may be represented by :—

Death-rate population plus the district's proportional share of all non-civilians enlisted from this country.

Deaths.

The number of deaths registered in the district was 1,072, but 591 of these did not belong to the district, while 52 residents died without the district. Thus the number of deaths properly attributable to the district was 533. Adopting the basis of the population

estimated by the Registrar-General, the death-rate for the district comes to 11.02 per 1,000, which is comparable with the folllowing figures :-12.2 for England and 11.7 for London.

The death rate corrected by the Registrar-General's factor of .931 is 10.26.

Births.

The total number of births registered during the year was 936, but 130 of these did not belong to this district, while 42 births properly belonging to this district occurred outside the district. The nett number of births thus attributable to the district is 848. Adopting the population basis suggested by the Registrar-General for the calculation of the birth-rate, this comes to 17.44 per 1,000. The birth-rate of England and Wales is 18.3 per 1,000, and for London 18.0 per 1,000.

Legitimacy.

The following figures give the number of births :—

LEGITIMATE.

Male.		Female.		Total.
428	...	388	...	816.

ILLEGITIMATE.

Male.		Female.		Total.
20	...	12	...	32.

Table of Causes of Deaths during 1925.

	Causes of Death.	Civil Residents all ages.	
		Male.	Female.
	All causes	267	266
1	Enteric Fever	...	...
2	Small-pox	...	...
3	Measles	1	...
4	Scarlet Fever	...	2
5	Whooping Cough	3	...
6	Diphtheria	5	3
7	Influenza	8	7
8	Encephalitis Lethargica	...	2
9	Meningococcal Meningitis	...	...
10	Tuberculosis of Respiratory System ...	11	19
11	Other Tuberculous Diseases	2	2
12	Cancer, Malignant Disease	36	39
13	Rheumatic Fever	...	1
14	Diabetes	2	3
15	Cerebral Hæmorrhage, &c.	8	12
16	Heart Disease	44	50
17	Arterio-sclerosis	13	4
18	Bronchitis	17	16
19	Pneumonia (all forms)	14	14
20	Other Respiratory Diseases	...	2
21	Ulcer of Stomach or Duodenum	1	2
22	Diarrhœa, etc. (under 2 years)	8	4
23	Appendicitis and Typhlitis	...	3
24	Cirrhosis of Liver	1	...
25	Acute and Chronic Nephritis	5	3
26	Puerperal Sepsis	...	3
27	Other Accidents and Diseases of Pregnancy and Parturition	...	3
28	Congenital Debility and Malformation, Premature Birth	19	13
29	Suicide	3	2
30	Other Deaths from Violence	15	6
31	Other Defined Diseases	51	51
32	Causes ill-defined or unknown	...	...

According to figures furnished by the Registrar-General.

Infantile Mortality during the year 1925.

Nett Deaths from stated Causes at various Ages under 1 Year of Ag

Cause of Death.	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks.	4 weeks and under 3 mts.	3 mts. and under 6 mts.	6 mts. and under 9 mts.	9 mts. and under 12 mts.	Total Deaths under 1
Certified	22	5	5	3	35	13	7	2	5	62
Smallpox										
Chickenpox										
Measles										
Scarlet Fever										
Whooping Cough										
Diphtheria and Croup										
Erysipelas										
Tuberculous Meningitis ...										
Abdominal Tuberculosis ...										
Other Tuberculous Diseases ...										
Meningitis (not Tuberculous) ...										
Convulsions	1	1	1	...	3	...	...	...	...	3
Laryngitis										
Bronchitis	...	...	1	...	1	3	...	...	1	5
Pneumonia (all forms)... ...	1	...	...	...	1	2	1	1	1	6
Diarrhœa	...	...	...	...	...	...	...	1	...	1
Enteritis	...	...	1	...	1	5	2	...	2	10
Gastritis										
Syphilis										
Rickets										
Suffocation, overlying ...	...	...	...	...	...	1	...	...	...	1
Injury at Birth										
Atelectasis	1	...	...	...	1	...	..	...	...	1
Congenital Malformations ...	1	...	1	...	2	1	...	...	...	3
Premature Birth	11	...	...	1	12	...	...	...	...	12
Atrophy, Debility and Marasmus	4	3	1	2	10	1	2	...	1	14
Other Causes	3	1	...	...	4	...	2	...	...	6
	22	5	5	3	35	13	7	2	5	62

Legitimate 816

Legitimate infants

Infant Mortality.

The figure obtained under this heading is regarded as a valuable index of the sanitary conditions of a district. Furthermore, as it is based on ascertained facts (*i.e.,* the actual numbers of births and infant deaths), it is more reliable than the death-rate which is calculated on an estimated population.

The rate for 1925 is 73.11 per 1,000 births. The rates for England and Wales and for London during the same period were 75 and 67 respectively.

Year.	Birth Rate.	Death Rate.	Infant Mortality Rate.
1921	20·09	11·28	69·4
1922	18·7	11·8	73·5
1923	17·45	9·8	54·9
1924	17·67	10·79	60·5
1925	17·44	10·26	73·1

PHYSICAL FEATURES OF THE DISTRICT.

The Urban District comprises an irregularly rectangular district of approximately eleven square miles, the average elevation lying between 16 and 104 above ordnance datum, the higher part being Osterley and Heston, and the lower part along the margin of the river from Brentford to the boundary at Twickenham. The Western end is also low lying and the water level comparatively near the surface, this part of the district being bounded by the River Crane. The greater part of the district is on valley gravel with pockets of clay at the Western end. The district is bounded on the Eastern side by the River Thames, the Grand Junction

Canal and the River Brent, and crossed from West to South East by the River Crane.

The district is roughly divided into two by the main Bath Road which intersects it from East to West. Large tracts of the district are occupied by market gardens, which are being rapidly cut into by new housing schemes. There are two large parks, one surrounding the residence of the Earl of Jersey at Osterly Park, and one at Syon House, the property of the Duke of Northumberland.

The greater part of the rest of the district is largely a dormitory for workers in London.

The industries are few, the chief being :—

(1) Beer etc., brewing.
(2) Boat building and repairing,
(3) Colours and dyes.
(4) Flour etc., milling.
(5) Gravel quarrying.
(6) Market gardening.
(7) Patent Animal foods .
(8) Pewter ware and candle machinery.
(9) Pharmaceutical Chemistry.
(10) Soaps and perfumes.
(11) Sweets, Confectionery.

The district is now rapidly developing in nearly all directions, the great majority of houses that are going up being of the working class type, valued round about £600. Great use is being made of the Small Dwellings Acquisition Act, and the Housing Act, particularly the former.

The large buildings of the Brentford Board of Guardians are situate at the Eastern end, and receive inmates from the constituent parishes of :—

Acton, Chiswick, Ealing, Greenford, Hanwell, Heston, New Brentford, Old Brentford, Isleworth, Perryvale, Twickenham and West Twyford.

Taken on the whole the district may be said to be comparatively flat from end to end.

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

HOSPITALS.

Hospitals provided or subsidised by the Local Authority or by the County Council :—

1. *Tuberculosis.*—The County Council have two institutions; The Bell Road Hospital, with 15 (9 male and 6 female), beds, and a section of the West Middlesex Hospital.

2. *Maternity.*—There is no definite provision in the district other than the West Middlesex Hospital (Guardians) for maternity cases apart from private nursing homes charging considerable fees. There are a few beds in the Hounslow Hospital and cases can also be dealt with at the West Middlesex Hospital, but the great majority of the cases which come under the notice of the Public Health Department are dealt with by the large London Hospitals.

3. The Hospitals in the district are the West Middlesex Hospital which is the Poor Law Infirmary. The Hounslow Hospital with 52 beds, is entirely supported by voluntary contributions. A Children's Ward of 8 cots with a solarium has been added during the year. The Mogden and Dockwell Hospitals for Infectious diseases and Small Pox are supported from the rates by the Councils of Heston and Isleworth and Richmond.

There is practically no difficulty in getting cases into the West Middlesex Hospital, but there is no out-patient department.

The Hounslow Hospital has a staff of consultants, but there appears to be a feeling for preference for the larger Hospitals with national reputation such as Gt. Ormond Street, Queen's Square, Brompton, Chelsea Hospital for Women and the larger hospitals. The difficulty in connection with this however, is that it entails a considerable expense, which many of the parents can ill afford and

in other cases where specialised treament is wanted, there is often considerable difficulty in obtaining the necessary letters demanded by the Hospital .

There is considerable difficulty in getting children out-patient treatment in the district. The medical practitioners of the district on the staff of the Hospital take a month on duty in rotation to see out patient cases. As can well be imagined this is a thoroughly unsatisfactory system in that the doctor coming on duty has the remains of one, two, three or more doctor's leavings to carry on with, cases which he has not seen from the beginning when they were of some interest compared with what they are when he sees them. In the same way, his leavings are handed on to his successor, and as they admit, this system is entirely unsatisfactory. It might be said that these cases should go to a Poor Law Medical Officer, but there are a considerable number of the cases which want special investigations which it would not be fair to expect a Poor Law Medical Officer to carry out, and which can only be done where all the facilities of a Hospital exist. The appointment of a House Surgeon is mooted, and this may perhaps improve matters. I have personally been able to get a great deal done as I have many friends on the staffs of the London Hospitals, general and dental, but it should not be that the personality of the Officer in charge of the work should be able to obtain treatment which should be available for any child, no matter who the Officer in charge is.

4. *Fever*—This district joins with Richmond in the form of a Joint Hospital Board, which is responsible for the Mogden Hospital dealing with Scarlet Fever, Diphtheria and Enteric, and the Dockwell Hospital with 13 beds for the accommodation of Smallpox .

AMBULANCE FACILITIES.

(*a*). *For Infectious Cases.*—This is provided by the Joint Hospital Board.

(*b*). *For Non-Infectious and Accident Cases*—There are none in the district, but arrangements have been made with the Board of Guardians whereby their ambulance is available at call. The question of the provision of a motor ambulance is under discussion.

CLINICS AND TREATMENT CENTRES IN THE DISTRICT.

The two Maternity and Child Welfare Centres are kept almost entirely for consultation purposes, treatment being reduced to an absolute minimum so as not to clash in any way with local Medical Practitioners.

The only Day Nursery in the district was closed in 1920.

There are two School Clinics at each of which the Medical Officer attends twice a week, and at which treatment for minor ailments is carried out on five mornigs in the week.

The Tuberculosis Clinic which is part of the County machinery is situate in Hounslow in the centre of a populous district.

There is no clinic for Venereal Diseases.

Professional Nursing in the Home.

The Isleworth Nursing Association carried on this work in part of the district, and the Osterley, North Hounslow and Heston Nursing Association deals with the cases in the remaining area.

It was found that nursing assistance in the Northern part of the district was sadly deficient, and the new Nursing Association was formed to remedy the defect.

One nurse has already started, and it is hoped in the near future to provide a second, as there is more work than one can deal with.

Midwives.

The inspection of Midwives is under the supervision of the County Council. It is, however, generally recognised that the authority administering a Maternity and Child Welfare Scheme

should also exercise control over the Midwives practising in its area.

In this district it is the practice of the Health Visitors not to visit the newly-born till 11 days after the birth, in order not to interfere with the Midwife.

According to the County Medical Officer's last list, there are 14 Midwives practising in the district.

ADOPTIVE ACTS AND BYE-LAWS IN FORCE.

Adoptive Acts in force in the District:

*Infectious Diseases (Prevention) Act, 1890.

*Public Health Acts Amendment Act, 1890, Part III.

*Public Health Acts Amendment Act, 1907, Parts II., *III., *IV.. *V., VI. and VIII.

*Public Health Act 1925, Parts *II., *III., *IV. and *V. were adopted in November, 1925.

Maternity and Child Welfare Act, 1918.

Baths and Wash-houses Act, 1846-82.

Burial Acts, 1852-85. (Applicable to parts of district only).

Private Street Works Act. 1892.

Public Libraries Act, 1892.

Small Dwellings Acquisition Acts, 1899-1923.

Local Government and other Officer's Superannuation Act, 1922.

Bye-Laws in force in District.

*Common Lodging Houses (P.H.A. 1875, *s.* 80).

*Cleansing, etc., and Removal of Refuse (P.H.A. 1875, *s.* 44).

*Houses Let in Lodgings (P.H.A. 1875, *s.* 90).

*Tents, Vans, Sheds, etc. (H.W.C.A. 1885, *s.* 9 (2)).

*Slaughter Houses (P.H.A. 1875 *s.* 169 and T.I.C.A. 1847, *s.* 128).

*Prevention of Nuisances (P.H.A. 1875, *s.* 44).

*Keeping of Animals (P.H.A. 1875, *s.* 44).

*Removal of Offensive Matters (P.H.A.A.A. 1890 *s.* 26).
New Streets and buildings (P.H.A. 1875, *s.* 157, and P.H.A.A.A. 1890. *s.* 23).
Pleasure Grounds (P.H.A. 1875, s.164).
*Fish Frying (P.H.A. 1875, *s.* 113).

Regulations made by Local Authority in force in District.

*Dairies, Cowsheds and Milkshops (D.C.M.O. 1885, *s.* 13).
Allotments (A.A. 1887, *s.* 6). Allotment Regulations, 1922.

*These are administered wholly or partly by the Health Committee. The unstarred are administered by other Committees of the Council.

SANITARY CIRCUMSTANCES.

SANITARY CIRCUMSTANCES.

Water Supply.

There were, as far as is known, at the end of the year 42 private wells from which the water was used for domestic purposes. In nine other cases there are wells, but an alternative supply from the main exists for domestic purposes.

In 43 instances draw-taps were placed on the main to the house, in compliance with notice from the Public Health Department, in *lieu* of a supply drawn from an inaccessible and uncovered cistern.

There seems to be some definite deficiency in the arrangements for water supply in a growing district such as this, particularly in the Western area. The Metropolitan Water Board's mains run along the Staines Road, and along the Bath Road. Houses are being built in the intervening area which have no water supply other than surface wells, owing to the large expense necessary to meet the demands of the Water Board for bringing the supply to this part of the district. There is further a very serious obstacle in the development of new areas in that the Water Board demand the total sum to be guaranteed before putting in a water supply to a house which may only be the first of many, and it would appear that some legislation is necessary to deal with the supply of water to developing districts, from a Public Health point of view. It is quite unfair to saddle the cost of the first installation to developing areas on to the first residents. This is really a Public Health matter and should be looked at as such, and not merely as the convenience of a water supply to an individual.

Drainage and Sewerage.

The sewerage of almost the whole district is arranged on the "separate" system.

The following extensions to the sewerage system have been carried out during 1925 ;—

Spring Grove Road.—The construction of a 6in. and 9in. sewer from near Kingsley Road to Culham Cottage, a length of 652 yards. The whole of Spring Grove Road is now sewered.

Westbrook Road.—The construction of a 9in. dia. sewer from Church Road to New Heston Road, a length of 490 yards. The whole length of Westbrook Road is now sewered.

North Hyde Lane.—The construction of a 6in dia. sewer from the "North Star" P.H. to near the Canal Bridge, a length of 208 yards. The whole length of this road is now sewered.

Culverting Watercourses.

Bath Road. The laying of 21 in. dia. pipes in watercourse and covering in same from Sutton Lane to "Oak Bungalow."

Bulstrode Avenue. The section of the main watercourse situated at the rear of houses on the north side of this road has now been covered in.

Closet Accommodation.

Accommodation on the water carriage system is almost general throughout the district, 99 per cent. of the houses having water closets.

Scavenging.

This is carried out by the Local Authority and is under the control of the Surveyor.

During 1925, collection of house refuse has continued weekly as before, and was disposed of by means of a dump in the Staines Road.

During the year as a result of action taken there were supplied 72 new ashbins.

Sanitary Inspection of District.

See pages 28—32.

Nuisances, Contraventions of Byelaws, Defective Drainage, etc.

The number of premises on which nuisances were outstanding at the end of 1924 was 463. To these another 472 premises whereat nuisances were recorded in 1925 were added, giving a total of 935 premises. Of these 472 had the nuisances remedied, leaving 463 premises at which nuisances still existed at the end of the year.

During the year, nuisances at 14 houses were reported to the Health Committee, which added to the 38 brought forward from 1924, made a total of 52. Before asking the authority to serve statutory notices, the premises are inspected by the Medical Officer of Health and Chief Sanitary Inspector. Statutory notices were authorised and served in most of these cases, and by the end of the year, the nuisances were remedied in 23 of the houses, and in 4 cases the major portion of the work was completed and it was resolved to take no further action with regard to that still outsanding, leaving 25 cases to be carried forward to 1926.

Comparative figures for the years 1921, 1922, 1923, 1924 and 1925, in connection with nuisances, are submitted herewith :—

	1921	1922	1923	1924	1925
Number of complaints received	496	460	459	381	366
Premises at which nuisances were located	932	722	740	470	472
Informal notices sent—					
First	682	568	636	402	368
Second	213	217	190	110	60
Statutory notices served ...	142	79	114	44	37

It is my duty once more to point out that the staff of Sanitary Inspectors is inadequate.

It must be placed on record that twice during 1920, recommendations urging the appointment of a District Sanitary Inspector to fill the existing vacancy, were sent forward by the Health Committee to the Council, but were defeated. In October, 1925 I again reported on the inadequacy of the staff to carry on.

During the last five years, the Department has been definitely understaffed, and it has been quite impossible to deal with anything except complaints. District inspection has been quite out of the question. The extra work necessitated by the Public Health (Meat) Regulations, 1924, made matters worse.

The problem of dealing with property at present is extremely difficult, the Rent Restrictions Act allowing only a 40 per cent. increase in the rent to cover the cost of repairs, which is in many cases totally inadequate. As things are now, many houses are being crowded with two, three or more families. Sometimes these houses have been of the better class more commodious houses, and in the ordinary way the 40 per cent. would have been comparatively just. Where these are sublet, often at an exhorbitant profit to more families, the wear and tear on the landlord's property is not in arithmetical progression, and he is in no way recompensed by the limited increase in the rent which he is allowed to charge. His tenant profiteers unblushingly and the landlord has to bear the burden, and has no remedy whatever unless legal overcrowding occurs. In nearly every case there is no legal overcrowding, but as pointed out elsewhere considerable moral overcrowding. At the same time there are landlords who are hard put to it, and the tenants have a great difficulty in getting anything done. It is very difficult at times to hold the scales justly between the tenant who has certain rights, and a harrassed landlord who is in certain cases deprived of his rights by statute.

SANITARY WORK, ETC.

Inspections—General:

Total number of inspections and re-inspections, etc. (excluding shops and petroleum)	10658

Inspections, etc. *re* Nuisances, Contraventions, etc.:

Number of premises, etc., inspected on complaint ...	416
Number of premises inspected in connection with infectious diseases	36
Number of premises inspected under Increase of Rent and Mortgage Interest (Restrictions) Act, 1920 ...	2
Number of smoke observations made	28
Number of other visits made to premises, etc., in connection with nuisances etc.	232
Total number of premises, etc., primarily inspected in connection with niusanses	759
Number of visits made to works in progress	608
Number of interviews with owners, builders, etc., *re* abatement of nuisances	559
Number of premises, etc., whereat nuisances were re-recorded during the year	472
Number of premises, etc., on which defects, etc., were remedied—	
(*a*) by owners	467
(*b*) by local authority in default of owner or occupier	5
Number of cautionary or intimation notices given—	
(*a*) verbal	111
(*b*) written	257
Number of second (informal) notices given	60
Number of letters *re* nuisances sent	187
Number of Statutory Notices issued	37
Number of proceedings taken	—
Number of convictions obtained	—
Number of proceedings withdrawn	—

Common Lodging Houses:

Number registered	2
Number of inspections made	16

Canal Boats used as Dwellings:

Number of inspections made	55
Number of contraventions found	8

Movable Dwellings, Caravans, Tents, etc.:

Number of inspections made	282
Number of contraventions found	9
Number of contraventions remedied	9

Bakehouses:

Number in district (*a*) factories	10
(*b*) workshops	17
Number of underground bakehouses in district ...	1
Number of inspections made	65
Number of contraventions found	3
Number reconstructed, repaired or improved	1
Number cleansed	5
Number of other contraventions remedied	4

Slaughterhouses:

Number on register (*a*) registered premises ...	4
(*b*) licensed premises. ...	4
Number of inspections made	1131
Number of contraventions found	15
Number cleansed	8
Number of accumulations of offal removed	2
Number of other contraventions remedied	1

Cowsheds:

Number of persons registered	10
Number of premises	11
Number of Cowsheds on register	10
Number of milch cows in district	151
Number of inspections made	55
Number of contraventions found	9
Number cleansed	7
Number of other contraventions remedied	2

Dairies and Milkshops:

Number of persons registered	31
Number of premises	35
Number of inspections made	222
Number of contraventions found	4
Number cleansed	4

Offensive Trades:

Number of businesses established in district	16
Number of inspections made	137
Number of contraventions found	2
Number of contraventions remedied	2

Inspection of Food:

Number of meat inspections	1513
Number of fish inspections	274
Number of provision inspections	415
Number of green grocery and fruit inspections ...	387
Number of hawkers foodstuff inspections	355
Number of other food inspections	109

Unsound Food:

Number of carcases seized	1
Number of carcases condemned by magistrate	1
Number of carcases surrendered	7
Number of parcels surrendered	1
Number of organs or parts surrendered during slaughtering	310

Infectious Diseases, Disinfection, etc.:

Number of visits made	403
Number of rooms disinfected (*a*) ordinary infectious diseases	151
(*b*) Tuberculosis ...	72
(*c*) Other diseases ...	15

Number of rooms stripped and cleansed after infectious diseases—	
(*a*) by owners or occupiers	11
(*b*) by local authority	6
Number of articles disinfected or destroyed	1139

Water Supply:

Number of supplies provided	6
Number of cisterns cleansed, repaired, covered etc. ...	3
Number of draw taps connected direct to main ...	43
Number of water service pipes or taps repaired ...	11
Approximate percentage of houses supplied on constant system	99.95
Number of samples taken for analysis from local wells	1

Drainage and Sanitary Arrangements, etc., of existing Buildings:

Water Closets:

Number of water closets provided or re-constructed ...	4
Number of walls, etc., cleansed	22
Number repaired, supplied with water or otherwise improved	127
Number of apparatus cleansed or unstopped	18
Approximate percentage of houses provided with water closets	99

Sinks:

Number of new sinks provided	11
Number of sinks repaired or improved	14

Drains:

Number examined, exposed etc.	8
Number unstopped, repaired, trapped, etc.	226
Number of waste pipes provided, disconnected, repaired trapped or un-stopped	34
Number of soil pipes fixed, repaired or improved ...	4

Number of ventilating shafts fixed, repaired or improved	5
Number of fresh air inlets provided, repaired or improved	11
Number of rain water pipes disconnected from drain...	16
Number of gulley traps inserted or improved... ...	28
Number of dis-connecting traps inserted	1
Number of inspection chambers inserted	1
Number of dis-connecting traps improved, sealed or cleansed	2
Number of inspection chambers repaired, improved sealed or cleansed	16
Number of drains constructed or re-constructed ...	19
Total length of drain pipes laid (4in.) ... ...327 ft.	
Number of tests and re-tests applied	51
Number of other works executed	19
Approximate percentage of houses draining into Council's sewer	99

Cesspools :

Number of cesspools provided	4

Removal of Household Refuse:

Number of new ashbins provided	72
Number of ashbins repaired	9
Number of ashpits abolished	3

Dampness:

Number of roofs stripped, renewed or repaired ...	124
Number of gutters and rain water pipes provided, repaired or unstopped	115
Number of instances in which external brickwork, sills, etc., repaired, renewed or rendered impervious ...	124
Number of damp-proof courses provided	42
Number of yards paved, repaired or drained	48

Interior Work:

Number of rooms stripped and cleansed (other than in connection with infectious disease)	183
Number of floors, walls and ceilings repaired or renewed	328

Number of rooms in which ventilation provided or improved	18
Number of rooms in which lighting provided or improved	1
Number of window frames and sashes provided, repaired or unfixed	237
Number of stoves or grates provided or repaired ...	71
Number of instances in which ventilation under floors provided or improved	48
Number of other repairs	24

Sundry Nuisances, etc.:

Number of instances in which domestic cleansing enforced	13
Number of food stores provided, cleansed or improved	2
Number of washing coppers provided or repaired ...	49
Number of rooms sprayed for the removal of vermin by the Disinfector	81
Number of instances in which overcrowding abated ...	8
Number of instances of improper keeping of animals abated	22
Number of offensive accumulations removed	16
Number of black smoke emissions abated	1
Number of urinals provided, repaired, cleansed or improved	4
Number of other nuisances abated	6

OTHER WORK.

Shop Acts:

Number of shops on register	883
Number of inspections made	641
Number of contraventions found	12
Number of warning notices given	12

Petroleum Acts, 1871-1881:

Number of premises licensed	55
Number of inspections made	358
Number of contraventions found	14
Number of new stores provided	6
Number of warning notices given	10

Report on the administration of the Factory and Workshop Act, 1901,

IN CONNECTION WITH

FACTORIES, WORKSHOPS AND WORKPLACES.

INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS.

Premises. (1)	Number of			
	Number on Register. (2)	Inspections. (3)	Written Notices. (4)	Prosecutions. (5)
Factories (including Factory Laundries) ...	50	119	...	Nil.
Workshops (including Workshop Laundries)	256	329	2	
Workplaces (other than Outworkers' premises	40	219	...	
Outworkers	35	34	...	
Total	381	701	2	Nil.

DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars. 1	Number of Defects.					Number of Prosecutions. 7
	Outstanding Jan. 1st. 1925. 2	Found during 1925. 3	Remedied during 1925. 4	Outstanding Dec. 31st, 1925. 5	Referred to H.M. Inspector. 6	
*Nuisances under the Public Health Acts:—**						
Want of cleanliness						
Want of ventilation						
Overcrowding						
Want of drainage of floors						
Other nuisances	2	3	5	...		
Sanitary accommodation—						
Insufficient	...	2	...	2	Nil.	Nil.
Unsuitable or defective	1	...	1	...		
Not separate for sexes	1	1	1	1		
Offences under the Factory and Workshop Act :—						
Illegal occupation of underground bakehouse (s.101)						
Breach of special sanitary requirements for bakehouses (ss. 97-100) ...	4	2	5	1		
Other offences :—						
Excluding offences relating to outwork						
Total	8	8	12	4	Nil.	Nil.

*Including those specified in Sections 2, 3, 7 and 8, of the Factory and Workshop Act, 1901, and remediable under the Public Health Acts.

†Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted by the District Council, and the standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops enforced is that required by the Sanitary Accommodation Order of 4th February, 1903.

OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.

NATURE OF WORK. (1)	Instances. (2)	Notices served. (3)	Prosecutions. (4)
Wearing Apparel—			
Making, &c.	—	—	—
Cleaning and washing	—	—	—
Household linen	—	—	—
Lace, lace curtains and nets	—	—	—
Curtains and furniture hangings	—	—	—
Furniture and upholstery	—	—	—
Electro-plate	—	—	—
File making	—	—	—
Brass and brass articles	—	—	—
Fur pulling	—	—	—
Cables and Chains	—	—	—
Anchors and Grapnels	—	—	—
Cart gear	—	—	—
Locks, latches and keys	—	—	—
Umbrellas, &c.	—	—	—
Artificial flowers	—	—	—
Nets, other than wire nets	—	—	—
Tents	—	—	—
Sacks	—	—	—
Racquet and tennis balls	—	—	—
Paper, etc., boxes, paper bags	—	—	—
Brush making	*1	—	—
Pea picking	—	—	—
Feather sorting	—	—	—
Carding, &c., of buttons, &c.	—	—	—
Stuffed toys	—	—	—
Basket making	—	—	—
Chocolates and sweetmeats	—	—	—
Cosaques, Christmas crackers, Christmas stockings, &c.	—	—	—
Textile weaving	—	—	—
TOTAL	1	—	—

* A Closing Order has been made with respect to the premises occupied by this outworker.

Premises and Occupations controlled by Bye-laws or Regulations.

There are 429 known places in this district which call for periodical inspection as follows :—

Houses let in Lodgings, Common Lodging Houses, Bakehouses, Slaughter-houses, Cowsheds, Dairies and Milkshops, Offensive Trades, Laundries (non-factory), Workshops, Workplaces and Outworkers.

SCHOOLS.

In this district there are 13 public elementary schools and one Central school, 3 are modern buildings, the remainder being for the most part old and lacking in up-to-date sanitary conditions.

HOUSING.

HOUSING.

There is considerable overcrowding in the district and I am being repeatedly asked to see if I can provide accommodation for cases who really urgently need it. There are many decent working class families who have not the chance to save the necessary deposit which would enable them to purchase a house. They have the necessary furniture, and the husband is in regular work, and if they are in a position to rent a decent house they are the class of people who can provide and keep a decent home for their children. There are many such families at present living under conditions which can only be described as intolerable. If something could be done for the employees of the big firms, who are in regular work and have been sufficiently long in the firm to be regarded as members of the permanent staff, whereby the firm could under some kind of State assistance advance the necessary deposit, deducting so much a week from the wages until the deposit is wiped off, very many of these cases could then be provided with houses, and would be only too glad to avail themselves of some such scheme. In view of the number of workers employed on the Railway and by the London General Omnibus Company, I approached Lord Ashfield some time ago to see if some such scheme could not be put into existence to deal with his staff. He took the matter up, but so far nothing definite seems to have been done. There must be provided by some means or other housing accommodation for this class of people who are unable to raise the necessary deposit. I have gone into the wages of a large number of these people, and it would not be right under the present circumstances to advise them to put by anything very large out of their wages towards the deposit, as to do so would inevitably mean the children going short to the detriment of their health.

There is a great demand to my mind for some small two-roomed tenements to provide accommodation for two particular classes, the newly married, and the old folks. The old people do not want a house which requires a lot of keeping up, and it is in-

advisable that old people should make their homes permanently with young ones if it can be avoided. Old age is intolerant of the noises and exuberances of a young family, and there is apt to be undue repression of the children where these conditions exist. It is neither good for the old folks, nor is it good for the children, nor is it advisable for young folks starting out after marriage on their journey through life to have the constant company of anybody else whose ideas in life may not entirely coincide with theirs.

Anyone with any social experience knows that the presence of the " in laws " is a fertile source of friction between young couples. Personally, although it is not the ideal thing, I believe that the present circumstances can best be met by the provision of small flats in large blocks to deal with these particular classes. Old folks it must be remembered do not want gardens, and these sort of things, which make an undue call on their limited energies. If they have a little place where they can keep their household goods with as little labour as possible, they can be perfectly happy, and these blocks of flats can be made, as has been shown, perfectly satisfactory from the health point of view.

To give these old people the single cottage and garden which is so often urged, is little good, unless the work of keeping them up is done by someone else other than the old folk. All these sort of things make extra expense which they cannot afford. They can be quite happy in comparatively simple surroundings provided they have their own little sanctum.

I. Fitness of Houses.

(1) (*a*)*General standard of Housing in the district* :

As already stated, the general standard is unsatisfactory.

(*b*) *General character of defects found to exist in unfit houses* :

Dampness due to want of proper damp-proofing, inadequate lighting and ventilation and general dilapidation are the main defects found.

(*c*) *How far defects are due to lack of proper management and supervision by owners* :

The defects found are in the main, due to owners neglecting to have repairs carried out.

(2) *Action taken as regards unfit houses under* :

(*a*) Public Health Acts ... See appendices.

(*b*) Housing Acts ... ... „

(3) *Difficulty in remedying unfitness, special measures taken and any suggestions in the matter* :

Principal difficulty is absence of suitable accommodation for families displaced by closing or demolition of unfit houses. Landlords give the price of materials and the cost of labour as reasons for delay or neglect in the repair of repairable houses.

(4) *Conditions so far as they affect housing, as regards water supply, closet accommodation and refuse disposal, together with measures taken during the year in these matters* :

Water supply is on the whole satisfactory.

Closet accommodation is generally adequate, but defective apparatus is frequently complained of, whilst in the outlying parts of the district are some houses not yet connected with the general sewerage system.

Refuse disposal :—a weekly collection is made.

II. Unhealthy Areas.

Information as to complaints received or representations made and action taken in regard to unhealthy areas, under Part II. of the Housing Act of 1925.

Nil.

III. Bye-laws relating to houses, houses let in lodgings, tents, vans, sheds, etc.

(1) *As to working of existing Bye-laws* :

For reasons given elsewhere it has been impracticable to maintain the inspection of houses let in lodgings, etc. Probably many houses are now technically houses let in lodgings owing to the abnormal housing conditions, but are not on the register.

(2) *As to need for new byelaws and revision of existing bye-laws* :

Some difficulty has been experienced in dealing with caravan dwellers under the existing bye-laws with regard to the disposal of refuse, and closet accommodation, and a revision of these bye-laws is under consideration.

IV. General and Miscellaneous.

Other action taken in connection with overcrowding, insanitary property and housing ... Nil.

V. Appendices, Statistics for year ending 31st December, 1925.

SHOPS ACT.

The number of contraventions of the Acts which were reported during the year was as follows :—

Open on half-holiday	3
Open after evening closing hour	3
Prescribed form of notices not exhibited (exempted articles afternoon)	1
Prescribed form of notices not exhibited (exempted articles evening)	5

PROCEEDINGS.

Proceeding were taken during the year in respect of a contravention of Section 4 of the Shops Acts 1912—Shop open after 1 p.m. on the day fixed for the weekly half-holiday. A fine of £1. 0. 0. and costs to the extent of £6. 6. 0. were imposed.

APPENDICES.

Housing Conditions Statistics. Year ended 31st December, 1925.

1. GENERAL.

(1)	Estimated Population Birth rate ...	48,620
	Death rate ...	48,350
(2)	General Death rate (corrected)	10.26
(3)	Death rate from Tuberculosis (all forms) ...	0.7
(4)	Infantile Mortality	73.11
(5)	Number of dwelling-houses of all classes ...	10,217
(6)	*Number of working-class dwelling-houses	5,314
(7)	Number of new working-class houses erected	477
	**Number of new houses other than working-class*	129
	Total number of new houses erected of all classes	606

2. UNFIT DWELLING-HOUSES.

I. Inspection.

(1)	Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	406
(2)	Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925	2
(3)	Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	2

(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation ... 64

(5) Number of houses, listed for inspection under the Housing (Inspection of District) Regulations, 1910, at end of year ... 1547

II. Remedy of Defects without Service of Formal Notices.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers 60

III. Action under Statutory Powers.

A. Proceedings under Section 28 of the Housing Town Planning, etc., Act, 1919, and Section 3 of the Housing Act, 1925—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs ... 3

(2) Number of dwelling-houses which were rendered fit—

(*a*) by owners 12

(*b*) by Local Authority in default of owners ... ... Nil.

(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intentions to close ... ... Nil.

B. Proceedings under Public Health Acts—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 11

(2) Number of dwelling-houses in which defects were remedied—

(*a*) by owners 15

(*b*) by Local Authorities in default of owners 1

C. Proceedings under Sections 17 *and* 18 *of the Housing Town Planning, etc., Act,* 1909, *and Sections* 11, 14 *and* 15 *of the Housing Act,* 1925—

(1) Number of representations made with a view to the making of Closing Orders ... 2

(2) Number of dwelling-houses in respect of which Closing Orders were made 2

(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit Nil.

(4) Number of dwelling-houses in respect of which Demolition Orders were made ... ... Nil.

(5) Number of dwelling-houses demolished in pursuance of Demolition Orders ... ... Nil.

D. Proceedings under Section 12 *of the Housing Act,* 1925—

Number of prosecutions taken for letting, attempting to let, occupying or permitting to occupy houses ordered to be closed ... ... Nil.

E. Other matters—

(1) Number of dwelling-houses closed voluntarily 1

(2) Number of dwelling-houses demolished voluntarily 1

3. UNHEALTHY AREAS.

Areas represented by the Local Authority with a view to Improvement Schemes under Part II. of the Act of 1925 ... Nil.

(1) Name of area ... ... —

(2) Acreage ... ... —

(3) Number of working-class houses in area ... —

(3) Number of working-class persons to be displaced ... ... —

(5) Staff engaged on housing work with, briefly, the duties of each officer.

The outdoor staff of the Health Department consists normally of one Chief Inspector and three District Inspectors.

During the War, two of the District Inspectors joined the Army and the third left to take up a position elsewhere, whilst the Chief Inspector carried on as best he could. Upon their discharge from the Army the two District Inspectors resumed duty, but sanction to fill the vacancy for a third Inspector has not been granted by the Council, notwithstanding representations made by the Health Committee.

There is no officer appointed wholly for housing duties, which are carried out by the above staff in conjunction with their other duties.

Table shewing dwelling-houses represented as unfit for human habitation.

Premises.	No. of houses represented by M.O.H.	Date of representation.	Date Closing Order made.	Date Closing Order determined.	Date Demolition Order made.	Date Demolition Order obeyed.	Date Demolition Order enforced.
Br't forw'd from 1924—							
‡*1-3, Poplar Cottages	3	8/1/14	24/2/14	...	22/12/14	...	...
‡15, South Street	1	11/1/15	27/4/15	...	23/11/15	...	...
1-4, Baker's Cottages	4	3/6/15	23/11/15	...	...	...	...
†14-34, London Road	11	12/5/19	22/7/19	...	...	...	...
†1-10, Syon Place, London Road	10	,,	,,	...	...	...	...
†65-75, Hanworth Road ...	6	12/1/20	23/11/20	...	...	...	...
175, Twickenham Road ...	1	,,	26/4/21	...	...	...	...
177, ,, ,, ...	1	,,	...	...	...	...	...
1 & 3, Wellington Road North	2	9/2/20	...	...	...	...	...
5, ,, ,, ,, ...	1	,,	28/7/20	...	...	...	...
2, Forman's (or Field's) Cotts., North Hyde Lane	1	10/7/22	...	...	...	...	...
1925—							
††12, Syon Cottages, Syon Lane...	1	9/3/25	28/4/25	...	...	...	...
Cottage situated in the Farm Buildings, Wood Lane Farm, Wood Lane	1	13/7/25	22/9/25	...	...	...	...

*17/4/14 Notices served on tenants of Nos. 1, 2 and 3 and complied with.
16/10/17 Notices served on new tenants of Nos. 1 and 3.
16/3/16 Demolition ordered in default of owner.
31/12/24 Nos. 1, 2 and 3 occupied.
†Closing Orders not served.
‡Demolition deferred until after the War.
††Owing to the relationship of this house to other adjoining houses, demolition could not be enforced, and the premises have been rendered uninhabitable.

HESTON & ISLEWORTH URBAN DISTRICT COUNCIL.

PUBLIC HEALTH DEPARTMENT,
COUNCIL HOUSE, HOUNSLOW,

4th May, 1926.

SIR,

Canal Boats Acts, 1877 to 1884.

In accordance with Section 3 of the Canal Boats Act, 1884, *I beg herewith to present the Annual Report for the year ended 31st December*, 1925, *as to the execution of the Canal Boats Acts*, 1877 *and* 1884, *and of the Regulations made thereunder, within the Urban District of Heston and Isleworth, Middlesex.*

INSPECTORS APPOINTED UNDER CANAL BOATS ACTS—

R. H. Butler (*Chief Sanitary Inspector*).
G. W. Ashworth (*District Sanitary Inspector*).
E. W. Barton (*District Sanitary Inspector*).

No special remuneration is paid for the position.

NUMBER OF INSPECTIONS, ETC.—

Number of Inspections made	55
Number of Canal Boats inspected	52
Number of boats found in order	45
Number of boats with two infringements ...	1
Number of boats with one infringement ...	6

NATURE OF CONTRAVENTIONS, ETC.—

Overcrowding	3
Cabins not in a habitable condition	2
No proper water vessels provided	1
Separation of sexes	1
Verminous condition	1

LEGAL PROCEEDINGS.—

No legal proceedings have been taken during the year.

Infectious Disease.—

One case of infectious disease was reported as occurring among the Canal Boat population during the year.

I am, Sir,

Your obedient servant,

ELWIN H. T. NASH,
Medical Officer of Health.

The Secretary,
Ministry of Health,
Whitehall, S.W. 1.

INSPECTION AND SUPERVISION OF FOOD.

INSPECTION AND SUPERVISION OF FOOD.

The following is the record of inspection of food premises :—

	No. of Inspections made.
Meat	1513
Fish	274
Provisions	415
Greengroceries and Fruit	387
Hawker's Food Stuffs	355
Number of other Food Inspections	109

Milk.

No material change has been observed during the past year in the conditions under which cow-keeping and milk-vending are carried on in the district. 277 inspections were carried out in respect of cowsheds, dairies and milkshops.

Unofficial milk analyses are made by the Medical Officer of Health.

The standard of the milk supply in the district on the whole has improved. Very little of the milk which is sold in the district now is not pasteurised, although only two firms have applied for a Licence to sell "pasteurised" milk under the Milk (Special Designations) Order, 1923.

There have been immense advances in recent years in dealing with milk, which before the War was sold under most unsuitable and often filthy conditions, the farmers mainly being concerned in supplying the bulk of a liquid which would not go sour before being consumed, and which did not contain too obvious gross impurities, in fact, the best definition which was given of milk was that of Mr. Wilfred Buckley before the war, that it was "a fourpenny opalescent fluid."

We were too much occupied with the standard of its fat content, and too little occupied with its cleanliness. Lately, great advances have been seen in this country, largely due to the activities of the Dairying Research Institute at Reading, and in and around London to the activities of the United Dairies and their associated companies, who are endeavouring to supply a clean trustworthy milk.

The bulk of the milk other than that supplied by the two firms who are licenced to supply " Pasteurised " milk is supplied from the large wholesale firms and is properly pasteurised before it reaches the dealers. Some of the milk supplied in the district however does not come up to this requirement.

Pasteurising is carried out in 3 ways, (1) Flash Pasteurising, which means rapidly heating for a short time to a temperature of about 170 degrees is the cheapest and easiest, but at the same time unsatisfactory in that it spoils the milk in two ways, depriving it of certain of its vital qualities, and spoiling the combination of fat in the milk as instanced by the interference with the cream line.

The other two forms are what are known as the Holder process, the more recent and satisfactory being known as the positive Holder process, which ensures that all milk is held for half an hour at a temperature of 145 to 150 degrees. This not only ensures as far as possible a safe milk, but a milk which retains practically all its vital qualities, and in which the combination of cream with the other constituents is not interfered with. The positive Holder process is the only satisfactory process to allow where a Licence for Pasteurised milk is given. Sterilised milk is also sold in the district, but this still further deprives the milk of certain of its vital qualities. There are a few firms still supplying what is advertised as a rule as " Fresh Cows Milk," but I cannot say that some of it is such that it should be used in its ordinary condition as children's food.

The following analyses is an instance of what I mean. The samples being 3 taken from one firm within a period of six months.

The Chemical Analyses gave as follows :—

1.—Specific Gravity 1032.7
Fat 3.3 per cent.
Solids not Fat 8.97 per cent.
Total Soids 12.27 per cent. Ash 0.72 per cent.
Preservatives. Not found.

The Bacteriological Examination shewed :—

Bacteria per cubic centimetre capable of growing on Gelatine in 72 hours at 20 Cent. 416,500

Bacteria per cubic centimetre capable of growing on Agar in 48 hours at 37 Cent. ... 313,000

Bacillus Coli. Present in 0.001 c.c.

Klebs Loeffleur Bacilli. Not found.

Tubercle Bacilli. Microscop. Exam. Not found.

Microscopical Examination of the Centrifugalised Deposit shewed very little extraneous matter. No Red Blood corpuscles were found but there was considerable excess of Polymorphonuclear Leucocytes with some Streptococci.

Chemically the milk is of good quality.

Bacteriologically the Milk would not conform to the requirements for Grade A Milk inasmuch as it contains too many bacteria and the Bacillus Coli is present in 1/1000th of a cubic centimetre. For an average milk the number of bacteria cannot be regarded as excessive but the Bacilli Coli is present in considerably larger numbers than should be the case if the milk was produced under cleanly conditions. In addition, the large number of Pus cells suggests an inflamatory condition of the udder of one or more cows.

2.—Pus cells present in large numbers.

This milk, whilst not up to the standard of Grade A milk, is of a fair degree of bacteriological cleanliness. It contains, however, organisms, in small numbers, indistinguishable microscopically from the Tubercle Bacillus. These organisms may possibly be derived from certain grasses, but the cows should be examined by a Veterinary Surgeon for any animal suffering from Tuberculosis.

3.—Bacteria growing on Agar at 37 degrees cent. per cubic centimetre in 48 hours ... 419,000

Bacillus Coli Communis. Present in 1/10,000th c.c.

Bacillus Enteritidis Sporogenes. Present in 20 c.c.

Extraneous Matter. Excessive.

Tubercle Bacillus. Microscopical. Not found.

Pus and Blood cells. Pus cells present in excessive numbers. Blood cells absent.

This milk is of a very low stanrard of bacterial cleanliness and is undoubtedly grossly contaminated with manurial matter. It can only be regarded as a " dirty " milk.

It must be borne in mind that pasteurising is only a measure of safety, and in one sense is a confession of failure in that it means that in order to ensure that a milk is safe for children we have to do something to counteract the dirtiness on the farm.

Clean Milk competitions have been running in Middlesex in order to try and educate the farmers, but the results are definitely disappointing. Through the efforts of the Dairying Institute at Reading, it has been proved that it is possible to produce a " Grade A " milk in the most unsuitable premises, provided there is adequate cleanliness of the cows, milkers and utensils, and that on the whole it can be done with ease and certainty at an expenditure not exceeding 1d. per quart on the retail price.

Under the Milk (Special Designations) Order, 1923, Milk was classified in the following categories " Certified," " Grade A, (Tuberculin tested)," " Grade A," and " Pasteurised."

Part I.

Conditions subject to which Licences for Selling Milk as "Certified" may be granted.

A.—*The following conditions apply to producers only* :—

(1)—(*a*) The producer shall cause every animal of the herd to be submitted to an examination and to a prescribed tuberculin test at intervals of six months and shall produce to the licensing authority the veterinary surgeon's certificate and the certificate of the prescribed tuberculin test within seven days after the respective dates of those certificates. He shall not permit any animal to be injected with tuberculin except on the occassions of the prescribed tuberculin tests;

(*b*) No animal other than an animal taken directly from a herd in respect of which a licence for the sale of "Certified" or "Grade A (Tuberculin tested)" milk is in operation, shall be added to the herd unless it has passed a prescribed tuberculin test immediately before it is so added;

(*c*) Where any animal is certified as re-acting to a prescribed tuberculin test it shall forthwith be removed from the herd, and where any animal is certified as showing evidence of any disease which is likely to affect the milk injuriously it shall be isolated or removed from the herd, as the case may require. The milk from an animal so isolated shall not be sold as milk from the herd. The producer shall inform the licensing authority of the reasons for the isolation or removal of an animal and, in the case of removal, of the manner in which it has been disposed of;

(*d*) A suitable system shall be adopted for the marking for purposes of identification of the animals in the herd, and a complete register of such animals shall be kept; and

(*e*) The herd shall be completely isolated from all other cattle.

(2) The milk shall be bottled on the farm immediately after production.

(3) Every bottle containing the milk shall be closed with a suitable tightly fitting disc and covered with a suitable outer cap overlapping the lip of the bottle and so fastened as to form a complete seal. The cap shall bear the name and address of the producer or of the dairy where the milk is produced, the day of production and the words "certified milk." The words "produced from cows which have passed the tuberculin test" may be added, but, except with the consent of the licensing authority, the cap shall bear no other words.

B.—*The following conditions apply to all holders of licenses to sell milk as "Certified"* :—

(1) The milk shall not be removed from the bottles or the seals broken before delivery to the purchaser.

(2) On a sample being taken at any time before delivery to the consumer the milk shall be found to contain :—

(*a*) not more than 30,000 bacteria per cubic centimetre; and

(*b*) no coliform bacillus in one-tenth of a cubic centimetre.

(3) The milk shall not at any stage be treated by heat.

Part II.

Conditions subject to which Licences for Selling Milk as "Grade A (Tuberculin tested)" may be granted.

(1) The conditions set out in paragraph (1) of sub-division A of Part I, in paragraph (7) of sub-division A of Part III, in sub-division B of Part III, and in paragraph (2) of sub-division C of Part III, of this Schedule shall apply with the substitution in Part III of the designation "Grade A (Tuberculin tested)" for the designation "Grade A."

(2) The milk shall not at any stage be treated by heat.

Part III.

Conditions subject to which Licences for Selling Milk as "Grade A" may be granted.

A.—*The following conditions apply to producers only* :—

(1) No animal which to the knowledge of the owner of the herd has at any time been tested with tuberculin and has re-acted to the test shall form part of or be added to the herd.

(2) The producer shall cause every milch cow belonging to the herd to be examined once in every three months, and shall produce to the licensing authority the veterinary surgeon's certificate within seven days after the date of the certificate.

(3) Where any animal is certified as showing evidence of any disease which is likely to affect the milk injuriously it shall be isolated or removed from the herd, as the case may require. The milk from an animal so isolated shall not be sold as milk from the herd. The producer shall inform the licensing authority of the reasons for the isolation or removal of an animal and, in the case of removal, of the manner in which it has been disposed of.

(4) If at any time it is shown to the satisfaction of the licensing authority that tubercle bacillus is contained in the milk, the producer shall take all necessary steps to ascertain which animals are diseased and to remove them from the herd and shall inform the licensing authority how such animals have been disposed of.

(5) A suitable system shall be adopted for the marking for the purposes of identification of the milch cows belonging to the herd, and a complete register of such cows shall be kept.

(6) The cows in milk belonging to the herd shall be kept separate from all other cows in milk.

(7) Except where milk is bottled by the producer in accordance with the procedure for bottling hereinafter specified, the milk shall be consigned from the dairy where it is produced in an unventilated sealed container which shall be labelled or marked in a suitable manner with the address of the dairy, the day of production (with the word "morning" or "evening" according to the time of milking), and the words "Grade A Milk."

B.—*The following conditions apply to persons other than producers* :—

(1) Except where the milk is delivered to the consumer in the containers in which it is received, the seals being unbroken, it shall be delivered either in bottles or in other suitable containers of not less capacity than two gallons.

(2) Every bottle containing the milk shall be closed with a suitable tightly fitting disc and covered with a suitable outer cap overlapping the lip of the bottle and so fastened as to form a complete seal. The cap shall bear the name of the dealer by whom the milk was bottled, and the address of the licenced bottling establishment, the words "Grade A" and the day of production and shall except with the consent of the licensing authority bear no other words. Where containers other than bottles are used, every container shall be closed with a tightly fitting cover and shall be suitably sealed and labelled.

C.—*The following conditions apply to all holders of licences to sell milk as "Grade A"* :—

(1) The milk shall not at any stage be treated by heat unless a licence to sell such milk as "Pasteurised" has been granted under this Order, and where such a licence has been granted the term "Pasteurised" shall be added after the designation "Grade A Milk" wherever such designation is used in connection with the sale of such milk or the labelling or marking of receptacles containing such milk.

(2) Milk sold as "Grade A Milk" shall be produced and treated under such conditions that on a sample being taken at any time before delivery to the consumer the milk shall be found to contain :—

(*a*) not more than 200,000 bacteria per cubic centimetre; and

(*b*) no coliform bacillus in one-hundredth of a cubic centimetre.

(3) Milk sold as "Grade A Milk Pasteurised" shall be produced and treated under such conditions that on a sample being taken before delivery to the consumer the milk shall be found to contain :—

(*a*) in the case of a sample taken at any time before the 1st day of January, 1924, not more than 50,000 bacteria per cubic centimetre, and no coliform bacillus in one-hundredth of a cubic centimetre; and

(*b*) in the case of a sample taken at any time after the year 1923 not more than 30,000 bacteria per cubic centimetre, and no coliform bacillus in one-tenth of a cubic centimetre.

Part IV.

Conditions subject to which Licences for Selling Milk as "Pasteurised" may be granted.

(1) The milk shall be pasteurised, that is to say, retained at a temperature of not less than 145 degrees and not more than 150 degrees Fahrenheit for at least half an hour, and be immediately cooled to a temperature of not more than 55 degrees Fahrenheit.

(2) The milk shall not be so heated more than once and shall not be otherwise treated by heat.

(3) The type of apparatus used for pasteurising and the methods employed shall be such as are satisfactory to the licensing authority.

(4) Every vessel containing the milk shall bear a suitable label with the words "Pasteurised Milk."

(5) On a sample of the milk being taken after pasteurisation and before delivery to the consumer, the milk shall be found to contain :—

(*a*) in the case of a sample taken at any time before the 1st day of January, 1924, not more than 200,000 bacteria per cubic centimetre; and

(*b*) in the case of a sample taken at any time after the year 1923 not more than 100,000 bacteria per cubic centimetre.

(6) Until the 1st day of January, 1924, the requirements contained in paragraphs (1) and (2) of these conditions shall be deemed to be satisfied if the milk is treated not more than once by a suitable heating process and immediately cooled to a temperature of not more than 55 degrees Fahrenheit.

No. of firms in the district licenced to sell—

"Certified" milk	2	(3 shops).
"Grade A (Tuberculin tested)." ...	1	(2 shops).
"Grade A"	—	
"Pasteurised"	2	(3 shops).

All the milk shops are being brought up to date to ensure complete cleanliness in dealing with their utensils, and under the new Regulations it is to be hoped that a really satisfactory standard will be reached and maintained. It should be pointed out that it is of little value providing a satisfactory milk supply to the consumer's door if the consumer does not take precautions to see that the milk is not contaminated by flies or dust, or decanted into dirty jugs. If it is imperative for the milk vendor to ensure that his utensils are sterilised so as to be thoroughly clean, it is equally important for the consumer, and the Milk Retailers Association point out with a certain amount of truth that a large proportion of the blame for dirty milk which causes trouble with the children is produced by contamination after the milk reaches the home.

The reason why so many Maternity and Child Welfare Clinics use large quantities of dried milk is that they thus ensure for the

child a perfectly clean sterile milk, which has the least possible chance of contamination in the home.

Meat Inspection.

1. *Meat Inspection.*—The Chief Sanitary and the District Sanitary Inspectors hold special certificates for meat inspection. Slaughter-houses and butcher's shops are visited periodically, and during the year 73 lbs. of diseased meat were seized, and 2206½ lbs. were surrendered. There are 8 slaughter-houses and 34 butchers' shops in the district. Each slaughter-house received on an average 11.78 visits per month.

2. *Public Abattoir.*—There is no public abattoir in the district. Slaughtering may take place any time, subject to the requisite notice being given. From time to time suggestions have been brought forward as to the possibility of establishing an abattoir. I have on every occassion advised against it, on the grounds that I do not think that at the present time the expense is justified, owing to the fact that by far the greater part of the meat coming into the district is bought at Smithfield and inspected there. There does not seem to be with the growth of the district any demand for further facilities for slaughtering at present.

3. *Action under Section* 117, *Public Health Act,* 1875.—
None during 1925.

4. *Tubercular Meat.*—73 lbs. were seized, and 1795¾ lbs. were surrendered during the year.

5. The following tabular statement on slaughter-houses is required :—

	In 1920.	In January, 1925.	In December, 1925.
Registered ...	4	4	4
Licenced ...	4	4	4
Total ...	8	8	8

The slaughter-houses as a whole are unsatisfactory.

The additional work thrown on the staff by the Public Health (Meat) Regulations, 1924, has been considerable and is best shown by the number of inspections as compared with previous years.

Number of Inspections made.	1921	1922	1923	1924	1925
Meat	497	759	960	556	1513
Slaughter-houses—Inspections made (not included in above) ...	133	172	245	204	1131

The majority of butchers have loyally fallen into line with regard to giving notice of slaughtering, one notable exception being an individual who seems to take a delight in giving the officers endless trouble as to the times of slaughtering. The requirements with regard to ensuring freedom from contamination have been in most cases satisfactorily followed by the provision of windows. The Regulations are in many ways entirely unsatisfactory. It is only necessary to take a bus ride from Hounslow to Hammersmith to see how extremely difficult it is for a Medical Officer in a district such as this with practically artificial boundaries, to deal with the problem in his own district if his near neighbours are failing to get the Regulations satisfactorily carried out. Directly he asks for the satisfactory arrangements foreshadowed in the Regulations, he is faced by the reply that neighbouring Authorities are doing little or nothing as compared with the demands which he thinks necessary. At the same time that the rigid inspection of meat, and its protection from contamination is demanded, we have side by side in the same street exposed to all the desiccated horse dung, dried sputum, and other things from the street, such things as dates, figs, and fresh fruit which are consumed raw, and sweets sold from barrows and pedlars' trays, which are unprotected and are all liable to be contaminated.

In view of the fact that practically every article of meat is only surface contaminated, and is submitted to adequate heating to en-

sure the sterilisation of the ouside of the joint, it is surely straining at the gnat and swallowing the camel when we allow such things as fruits, sweets, etc., above-mentioned, to be exhibited without any form of protection.

Sale of Food and Drugs Act.

I am indebted to Dr. J. Tate, County Medical Officer, for the following report prepared by the Chief Officer of the Public Control Department, as to the samples purchased in this area during 1925.

Article.	Taken	Adulterated.
Milk	231	4
Milk, separated	3	—
Cream	13	6
Butter	14	—
Coffee	4	—
Cornflour	2	—
Cream of Tartar	1	—
Curry Powder	4	—
Fruit, dried	1	—
Jam	2	—
Iodine, Tincture of	1	—
Mustard	1	—
Spice, mixed	1	—
Tea	2	—
Tumeric	1	—
Whisky	2	—
White Precipitate Ointment	1	—
	284	10

The figures given for adulterated samples include two informal samples of milk and four informal samples of cream in respect of which no proceedings could be taken.

Prosecutions for Milk	...	...	...	2
Prosecutions for Cream	...	...	...	1
Official cautions for Cream		...	...	1
Fines and Costs imposed	...	£11. 18. 0.		

It is surely a curious anomaly in our law which allows a person who is prosecuted for an infringement of the Acts and who pleads guilty to be able to avoid cross examination, so that the previous record of shortcomings can be concealed. By this means it is possible for an offender who is being prosecuted as a result of accumulated evidence of several infringements of the law to be dealt with solely on the one count, provided he pleads guilty, and it is then impossible to bring in the evidence of the infringements which led up to the final prosecution, and the result is that the offender may, and does get off with a very light penalty or even costs, whereas it would have been possible otherwise to prove that the offence has been a continuous and deliberate one and not a mere accident.

The outstanding event in dealing with food and drugs was the outbreak of Lead Poisoning in 1922, due to the presence of lead in the enamel of beer containers in the houses of one of the firms of local brewers. With one exception, all the cases recovered. One died, but the death could not be attributed to the lead poisoning, although it was recorded as a contributory cause. As far as can be ascertained, this outbreak is the only one on record of any number of cases due to the presence of lead in beer. The circumstances were fully set forth in the special report in 1922.

UNSOUND FOOD, 1925.

	tons.	cwts.	qrs.	lbs.
Fish	—	—	3	0
Meat	1	0	1	11½
	1	0	4	11½

INFECTIOUS DISEASES.

INFECTIOUS DISEASE.

The number of cases of diphtheria recorded are swelled by a small percentage of bacterial cases, as it is extremely difficult in working class homes to deal with these in any way except by removal to hospital. As we have not our own Isolation Hospital, but are members of a Joint Committee, the machinery is eased by definitely notifying these cases, but the Medical Superintendent is always informed as to the circumstances which have led to the admission of the patient. This has been found to work satisfactorily. There has been urgent need during the last five years for a proper Observation Block, and further proper accommodation both for patients and staff at the Joint Hospital. A movement is at last on foot to provide extra accommodation.

The number of return cases of scarlet fever and diphtheria during the last five years is as follows :—

	1921.	1922.	1923.	1924.	1925.
Scarlet fever ...	—	1	—	1	4
Diphtheria ...	5	3	1	3	1

The usual period allowed when speaking of a "Return Case" is 28 days after the return home of a case from Hospital, or 28 days after the release of a case from Isolation at home.

Diphtheria.

Diphtheria still remains a disappointing disease to deal with from the Medical Officer of Health's point of view. It is established beyond all question that the administration of anti-toxin on the first day of the illness is an absolute safeguard, and yet we have to face year after year a number of deaths from this disease. This is largely due to the fact that the onset of the symptoms are very often much less pronounced than in a case of simple tonsillitis. It is a curious paradox that a child who has a sore throat and a big temperature, 103—105, is infinitely more likely to be suffering from simple tonsillitis than a child with a sore throat and a temperature below 100 and even normal, and the constitutional

disturbance in the very early stage may be actually very much less in a case of diphtheria, and for that reason, amongst the poorer classes, there is hesitation in sending for medical assistance until the illness assumes more formidable proportions, and with every day that passes without the administration of anti-toxin, the prospects of a satisfactory termination rapidly diminish. Everything has been done in this district to facilitate the provision of anti-toxin at the earliest possible moment. Cases supplied with sterile syringes in alcohol, with 4 vials of anti-toxin (each of 8000 units,) alcohol, and cotton wool, are kept at the Police Stations at each end of the district, available at any hour of the day or night.

Personally I am beginning to have grave doubts as to the wisdom of assisting practitioners by bacteriological diagnosis. I am convinced that many a case loses its chance through waiting for the result of a swab. Here we are in the fortunate position that with our bacteriological laboratory, the result of a swab is in the possession of the practitioner by the next morning, so that the delay in receiving the report is reduced to the minimum possible, and yet I am still doubtful as to whether it would not be wiser to discontinue this facility entirely, if that might lead to cases being determined more on clinical grounds, and the doubtful cases getting the necessary anti-toxin. Even to-day, it may almost seem incredible that there should be one moments delay in the administration of anti-toxin in cases which may be regarded with any degree of certainty as diphtheria, but yet one still comes across cases where this delay has occurred.

The investigation with regard to the treatment of diphtheria has within the last few years made much progress. It was pointed out by Schick in America that it would be possible as a result of injecting into the skin a form of diphtheria toxin to produce a reaction in people who were susceptible to diphtheria.

Unfortunately in the very early days certain experiments were carried out in some countries, particularly on the Continent, in

which inadequate precautions were taken as a result of inadequate knowledge, with the result that disasters occurred which brought the method into severe ill repute, so much so that in one State it has been entirely prohibited. Further continued experiments have however proved that with the modifications now in use, this test in the case of children is reliable and safe. There are of course certain disturbances caused by any inoculation such as this which are in no way worse or even as bad as the reaction of ordinary vaccination. In adults however there are likely to be more severe reactions as was found in typhoid inoculations during the war, where persons are sensitive to the proteins which are present in the serum forming the injection, and the reactions are due to this alone and not to the diphtheria toxin present.

A further discovery was made that by injecting a mixture of toxin neutralised by anti-toxin it was possible to immunise persons who were found to be susceptible as a result of a positive Schick testing. We are thus able nowadays to immunise against diphtheria the majority of susceptibles found on testing, and in several of the largest Hospitals all the nurses are Schick tested before they are put into the diphtheria ward, and the results as shown by the drop in the incidence of diphtheria amongst the staff is striking.

At North Hyde School, as set forth in the report for the year 1924, I advised the Authorities to Schick Test the entire school population, and such of the staff as would be tested. The result has been, if one may say so, dramatic. (There is a constant influx of boys from poor homes, many in a debilitated condition, from various parts of the country. These were all Schick tested on admission and immunised). The incidence of cases of diphtheria during previous years is shown hereunder.

DIPHTHERIA.

North Hyde Schools.—Cases Notified.

Year.	1920.	1921.	1922.	1923.	1924.	1925.
	1 ...	1 ...	1 ...	13 ...	23 ...	3

The children were Schick tested and immunised about Christmas 1924, and early in 1925. One case has been notified since, in July 1925, the case of a small boy who had only been admitted three weeks before from Monmouthshire.

Beyond this, from the time of immunising there has not been a single case of diphtheria in the building.

Scarlet Fever.

Scarlet fever to-day is one of the greatest curses from the administrative point of view. Its diagnosis in the old days was obvious, but to-day as was pointed out by one of the Superintendents of a large fever hospital, it is one of the most difficult diseases to diagnose, in some Institutions the errors in diagnosis amounting to 40 per cent. of the admissions to the scarlet fever wards.

Since the discovery by the two doctors Dick in America of the streptococcal cause of scarlet fever much investigation has been going on and now a reaction, similar to the Schick reaction for diphtheria, known as the Dick reaction, is being carried out, whereby it is possible to differentiate the susceptible from the non-susceptible working along the same lines, and the protective inoculation is being employed to immunise the susceptible.

In addition to these, there is what is known as the Schultz Charlton inoculation where by inoculating the serum from a convalescent case into a doubtful case it is possible to tell with almost certainty whether a doubtful case is one of scarlet fever or not.

The type of the disease which we have had in the district during the last five years has been mild in character, but however mild it may be, it does not safeguard the patient from the unpleasant sequelae mainly ear troubles which are apt to last for many years and often with serious consequences.

The following table shows the number of cases which have been notified, and the number and percentage of cases which have been removed to Hospital :—

No of civil cases notified	86
No of civil cases removed to Hospital	74
Percentage of cases removed to Hospital	86

The incident rate of Scarlet Fever in the civil population was 1.77 per 1,000. Two deaths took place from this cause during the year.

Diphtheria.

The following table shows the number of notifications received and the percentage of cases of Diphtheria removed to Hospital :—

No. of civil cases notified	73
No of civil cases removed to Hospitals	72
Percentage of cases removed to Hospitals	98

The incident rate per 1,000 of the civil population was 1.5. Twenty-nine cases occurred in institutions during the year.

Eight deaths took place from this disease, i.e., a case mortality rate of 11.1 per cent. One military case was also notified and removed to Mogden.

Diphtheria Antitoxin.

Arrangements have been made whereby boxes containing Sterile Antitoxin, syringe and the necessary dressings, etc. are kept at the two Police Stations so as to be available in case of emergency.

During 1925, 29 vials of Antitoxin were supplied to medical practitioners. (3 of 2,000 units and 8 of 4,000 units and 18 of 8,000 units).

Enteric Fever.

There were no cases notified during the year.

Dysentery.

One case was notified, removed to Mogden, and two days later transferred to St. Mary's Hospital, Paddington.

Erysipelas.

20 cases of this disease were notified, of whom 10 were West Middlesex Hospital cases.

Ophthalmia Neonatorum.

See pages 158—161.

Puerperal Fever.

3 cases of this disease were notified, 1 was an institution case.

Like some of one's professional brethern one has wondered whether better results for the parturient woman might not be arrived at if something could be done other than notifying cases of Puerperal Fever. True that when a case is notified it starts in train the machinery for the suspension if necessary of the midwife, and the disinfection of utensils, instruments and garments, but as a rule by this time the damage is done to the unfortunate mother.

There is I am convinced a very real reluctance on the part of any practitioner to notify a case of his own as one of Puerperal Fever, as it thereby implies that something which he may have done has been responsible for the infection, whereas he is often called in by a midwife, or there has been a midwife or nurse in attendance who has been the cause or agent, and yet his name has to be put to the notification and to bear the brunt of any odium which may be attached to the notification.

This was brought to light very prominently in a case in the district some little while ago which was not notified by the doctor in attendance, but was sent into an Institution as a case of child bed fever. The Medical Officer of the Institution notified it as a case of Puerperal Fever promptly. My own feeling is that if some machinery could be devised whereby cases of rise of temperature could be dealt with under some other name than Puerperal Fever so that all cases came to the cognisance of some Central Authority such as the M. O. H., whereby they could obtain Institutional treatment or expert advice, I am sure that medical men would welcome such a scheme as it would obviate having to make the diagnosis and notification of cases of Puerperal Fever. They have a considerable number of cases of rise of temperature, and these would be dealt with at the earliest possible moment. As it is there is now a very definite interval of delay until the temperature assumes such severity as warrants the reluctant practitioner in notifying the case as one of Puerperal Fever.

There are few Medical Officers of Health who have been in general practice and who are able to see the thing from the general practitioner's point of view. I happen to be one of the very few whole time officers who have had a considerable number of years in a large general practice on my own account. I know the position from the general practitioner's point of view and am able to sympathise entirely with his position in the matter, and I believe that if we can devise some better scheme than that existing at present it may be to the definite benefit of the puerperal woman.

Encephalitis Lethargica.

See also special report, pages 81—144.

There were 17 cases notified this year, two of which proved fatal. One case was notified from the West Middlesex Hospital.

Cerebro-Spinal Fever.

No cases of this disease were notified.

Acute Poliomyelitis.

No cases were notified.

Pneumonia.

70 cases were notified. 30 notifications were from the West Middlesex Hospital.

Malaria.

There were no cases notified during the year.

Non-Notifiable Diseases.

Information respecting non-notifiable infectious diseases is usually gained through notifications by the Head Teachers and School Attendance Officers. The undermentioned table sets forth the numbers of such cases for the last five years :—

Disease.	1921.	1922.	1923.	1924.	1925.
Measles	10	413	3	563	239
German Measles	8	1	5	30	43
Chicken Pox	166	64	62	100	243
Mumps	167	256	111	308	266
Whooping Cough	125	88	63	67	213

Upon receipt of information of the existence of a case, inquiry is made by a Health Visitor to obtain all necessary facts.

Influenza.

The mortality from Influenza was 0.31 per 1,000.

Cleansing of Verminous Persons.

Particulars are asked for as to the facilities available in the district for the cleansing and disinfection of verminous persons and their belongings.

Neither the Education Authority nor the Sanitary Authority possesses a cleansing Station. This matter has been brought to the notice of the Education Committee on many occasions. Where application is made, the Health Department undertakes the spraying of rooms for the removal of bed bugs, and bedding and clothing generally can be disinfected by steam at Mogden Isolation Hospital.

Infectious Disease Cases Notified.						Deaths.				
Year.	1921	1922	1923	1924	1925	1921	1922	1923	1924	1925
Small-pox	...	...	...	7	...	...	...	...	...	...
Scarlet Fever	220	228	92	113	86	6	2	1	...	2
Diphtheria	102	67	106	105	73	12	9	10	10	8
Enteric Fever ...	5	5	6	4	...	...	1	...	...	...
Puerperal Fever	10	12	17	10	3	3	2	2	1	3
Erysipelas	16	29	15	32	20	...	...	...	2	2
Cerebro-Spinal Fever	1	4	...	...	1	...	1	1	...	...
Encephalitis Lethargica ...	2	3	1	33	17	...	1	...	3	2
Poliomyelitis	1	1	1	...	...	...	...	...	...	...
Pneumonia	43	127	99	171	70	41	29	27	37	28
Malaria	1	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis ...	43	57	57	43	52	38	41	35	36	29
Other forms of Tuberculosis ...	11	9	11	20	13	7	7	6	13	5
Ophthalmia Neonatorum ...	3	5	4	4	7	...	...	...	...	...
Dysentery	1	...	...	...	1	...	...	...	...	...
Anthrax	...	...	1	...	...	...	...	...	...	...

Notifiable Diseases during 1929.

DISEASE.	TOTAL CASES NOTIFIED.												CASES ADMITTED TO HOSPITAL.	
	Under 1 year.	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	10-15 years	15-20 years	20-35 years	35-45 years	45-65 years	65 years and over.	MOGDEN.	OTHER HOSPITALS.
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	2	4	5	7	11	35	11	5	5	...	1	...	68	6
Diphtheria ...	1	5	6	7	7	22	7	2	11	3	2	...	54	18
Erysipelas ...	...	...	1	...	...	...	2	2	1	...	6	8	...	11
Puerperal Fever...	...	...	...	...	...	...	...	1	1	1	...	...	...	...
Ophthalmia Neonatorum	7	..	...	...	...	...	...	...	...	...	...	...	...	3
Poliomyelitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro Spinal Fever	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Pneumonia ...	5	3	6	2	3	5	4	4	10	13	9	6	...	34
Dysentery ...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Malaria ...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	...	...	...	...	...	1	2	2	1	4	4	3	...	1

For Tuberculosis Notifications—see other Table.

Infectious Diseases, 1925. Cases Notified.

	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.	Cerebro-spinal Fever.	Encephalitis Lethargica.	Poliomyelitis.	Pneumonia.	Malaria.	Respiratory Tuberculosis.	Other forms of Tuberculosis.	Ophthalmia Neonatorum.	Dysentery.	Anthrax.	Small-pox.
January ...	11	4	...	...	3	...	2	...	9	...	3	1	1	...	...	...
February ...	6	15	...	...	2	...	2	...	16	...	5	...	...	...	...	...
March ...	8	2	...	...	2	...	1	...	1	...	4	1	...	...	...	...
April ...	3	11	...	...	1	...	1	...	4	...	6	1	1	...	...	...
May ...	6	8	...	...	1	...	1	...	5	...	1	...	...	...	...	...
June ...	7	6	...	1	1	...	1	...	5	...	3	2	...	...	...	...
July ...	6	7	...	...	1	...	...	...	3	...	3	1	...	...	...	...
August ...	2	7	...	...	1	...	1	...	...	...	3	...	1	...	...	...
September ...	5	7	...	1	1	...	...	...	1	...	4	1	1	...	...	...
October ...	11	2	...	...	1	...	2	...	5	...	11	2	1	...	...	...
November ...	11	1	...	...	...	1	1	...	3	...	7	2	1	1	...	...
December ...	10	3	...	1	6	...	5	...	18	...	2	2	1	...	...	...
Totals ...	86	73	...	3	20	1	17	...	70	...	52	13	7	1	...	...

Deaths from Notifiable Infectious Diseases, 1925.

Age Groups.

	Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years.	10 years.	15 years.	20 years.	35 years.	45 years.	65 years and over
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	...	...	...	...	1	...	1	...	...	...	...	...
Diphtheria	...	...	1	1	...	5	1	...	...	...	...	...
Enteric Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ...	...	...	...	...	...	...	...	...	2	1	...	...
Pneumonia ...	6	2	...	...	...	...	...	...	2	3	6	9
Encephalitis Lethergica	...	...	...	...	...	...	...	...	...	...	1	1
Cerebro Spinal Fever	...	...	...	...	...	...	...	...	...	...	...	..
Erysipelas	...	...	...	...	...	...	...	...	...	...	1	1
Total ...	6	2	1	1	1	5	2	...	4	4	8	11

For Tuberculosis Deaths—see other Table.

The table hereunder gives the number of cases of infectious diseases that occurred in the several Institutions in the district during 1925:—

	SMALL-POX.	ENTERIC FEVER.	SCARLET FEVER.	DIPHTHERIA.	PNEUMONIA (all forms).	ERYSIPELAS.	PUERPERAL FEVER.	CEREBRO SPINAL FEVER.	OPHTHALMIA NEONATORUM.	ENCEPHALITIS LETHARGICA.	PULMONARY TUBERCULOSIS.	OTHER TUBERCULOSIS.	POLIOMYELITIS.	TOTAL.
West Middlesex Hospital	...	...	2	23	30	10	...	1	...	1	9	...	...	76
Military Hospital	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Hounslow Hospital	...	...	...	2	...	...	1	...	...	...	...	...	...	3
North Hyde Schools	...	...	3	3	...	...	...	...	...	...	...	...	...	6
Royal Naval School	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	...	...	6	29	30	10	1	1	...	1	9	...	...	87

COUNCIL LABORATORY, 1925.

	Total.	Positive.
(a) Swabs for Diphtheria sent by Medical Practitioners	107 ...	10
Sub-cultures	0 ...	0
Taken from Schools, Clinics and from Contacts	372 ...	12
Sub-cultures	1 ...	0
Sent from Staines Joint Isolation Hospital ...	229 ...	16
Sub-cultures	0 ...	0
St. Mary's School, North Hyde	91 ...	12
Sub-cultures	4 ...	3
Total cultures examined	804 ...	53
Virulency Tests	1 ...	1
(*b*) Blood examination for Typhoid Widal Tests	1 ...	0
(*c*) Cerebro Spinal Fluid Examinations ...	0 ...	0
(*d*) Specimens of Sputum for Tubercle Bacilli :—		
Sent by Medical Practitioners	66 ...	11
Sent by M.O.H.	1 ...	0
Total ...	67	11
(*e*) Hairs for Ringworm—		
Taken at Schools or Clinics	12 ...	9
(*f*) Other Specimens—		
Urine	142	
Discharge	13	
Preparation of Materials—		
Tubes of Serum	1130	
Throat Swab Outfits	970	
Sputum Outfits	112	
Typhoid Outfits	0	

The bacteriological work of the Staines Joint Isolation Hospital continues to be done in the Council Laboratory.

We also continue to supply the Mogden Isolation Hospital with Diphtheria Culture Tubes.

The Virulency and Widal Tests were carried out for us by Dr. Harold Spitta at St. George's Hospital.

ENCEPHALITIS LETHARGICA.

ENCEPHALITIS LETHARGICA.

The problem in this case has been difficult. The number of cases notified were as follows :—

1921	1922	1923	1924	1925
2	3	1	33	17

A batch were also notified in the early part of 1926, which really arose in 1925.

The disease which was brought to notice in 1917, has spread rapidly through Europe and this Country, but apart from the Derby outbreak in 1919, has shown little inclination to spread in houses like the commoner infectious diseases, and second cases are rare.

Up to 1922 the mortality was put at about 50 per cent. but the report of Dr. Parsons to the Ministry of Health stated that " There is some reason to think however, from evidence collected since 1920, that the disease generally is assuming a milder and less fatal form."

The after results of the cases that recover are often extremely grave, in fact so grave, that special legislation is being asked for and special institutions are being provided for dealing with these cases.

In some cases there are paralytic symptoms combined under the appellation of Parkinsonism.

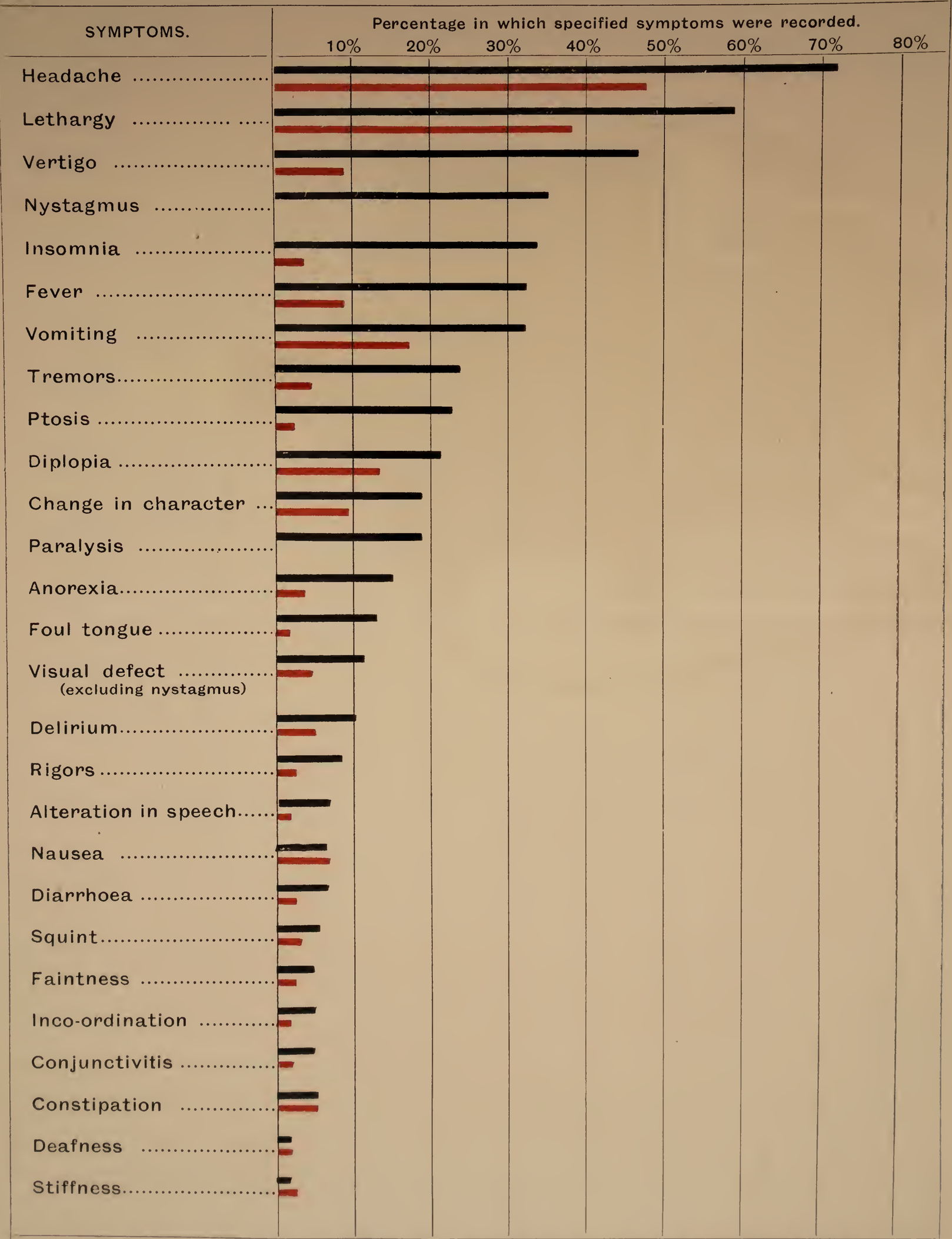
Parkinsons disease or Paralysis Agitans is characterized by a " mask like " expressionless face, a shuffling unsteady gait and various paralytic symptoms with tremors. In others, the after results are entirely psychological or mental as shown by alterations of character, instability, and often moral delinquency, these latter causing a new and special anxiety in the Police Courts. Unfortunately these latter symptoms may not develop for a long period, even years after the original illness, and the original illness itself may have been quite slight in its manifestations and have given no indication whatever of the seriousness of the after effects. In

ENCEPHALITIS LETHARGICA.

COMPARATIVE FREQUENCY OF SYMPTOMS.

BLACK – Comparative frequency of symptoms.

RED – Comparative frequency of initial symptoms as given by Parsons (1922).



In the graph set out above, the symptoms arising in the cases in this district are shewn in black, and those recorded by Parsons in red.

younger patients the symptoms may easily be confused with those of Tubercular Meningitis, and this will be shown in the accompanying list of cases notified.

Owing to the difficulty in diagnosis, many cases are not notified till some time after the onset, and for that reason, and to make the account of the cases complete, I am including cases notified early in 1926.

The problem I had to face was that by far the great majority of the cases were being notified by one Practitioner, also that they were occurring in one part of the district, largely in an area a mile in radius from the "Bell." No particular attention was given to the earlier cases beyond the investigation necessary upon notification. As the cases developed in number, I tried to get clinical notes either through the medical men themselves or as a result of personal investigations. With the increasing numbers I tried to explore various items with a view to throwing any light on the prevalence

Various articles of food particularly, were investigated but the investigation led to nothing of any value whatever. One outstanding item was the occurrence of a batch of definite cases near Pownall Gardens.

The problem of the repeated notification of cases by one Practitioner was, if he was correct, how did it happen that practically none of the other Practitioners were seeing any cases, in other words there must have been a large number of mild cases being missed. Owing to this, I saw several cases myself and in all but two, I was of the opinion that they were definite, but for the most part mild cases of Encephalitis Lethargica.

So important was it to establish or refute the diagnosis that I got Dr. Parsons from the Ministry of Health to see the same cases. In the meantime, the Practitioner withdrew the notification himself of one of the cases I did not confirm, and by Dr. Parsons' visit, fresh symptoms had supervened in the other case making the diagnosis evident.

I circularized the Practitioners drawing attention to the position as follows :—

Public Health Department,
Council House,
Hounslow.

20th May, 1924.

Dear Sir,

ENCEPHALITIS LETHARGICA.

In view of the fact that six cases of Encephalitis Lethargica have been notified in the district within the last week, and two cases just outside, it is important that watch should be kept for cases, which are all of a mild type, the first three cases only having been recognised some weeks after the original onset.

The history of the cases is set out below—it will be seen that the cases vary somewhat in type.

(Then followed the history of six cases.)

Since the above, five further cases have been notified.

An Inspector of the Ministry of Health will be visiting the district to-morrow, Wednesday, 21st May.

If you have any doubtful case you would care for him to see—please telephone to me by 10 a.m. to-morrow, giving particulars.

Yours faithfuly,
ELWIN H. T. NASH.
Medical Officer of Health.

Later in 1925, fresh cases were notified by the same Practitioner, most of them being of a slightly different character and the diagnosis more difficult.

I stressed to the Ministry the importance of expert opinion to confirm as far as it was possible the diagnosis and to be in a definite position to say that the condition was Encephalitis Lethargica and

not any other neurological manifestation, which might reasonably be mistaken for it. As a result, Dr. Salisbury Mac Nalty, the Milroy and Chadwick Trust Lecturer on Encephalitis Lethargica and Dr. Parsons of the Ministry of Health, both came down and saw the last batch of cases. With one exception the diagnosis was confirmed. So important do I consider it to establish the diagnosis and to place on record our findings that I append a summary of the symptoms of each case together with short clinical notes of such cases as I could get them from. In most of the cases I am indebted to the Doctor in attendance for clinical notes, which are supplemented by my own as the result of later visits. The end results I have confirmed by personal visiting and recording the results in most cases. I wish particularly to emphasize the value of Dr. Darke's notes which are bedside notes, supplemented by after recovery notes. Dr. Darke is the practitioner above referred to whose diagnosis had to be vindicated.

These cases demonstrate the fact that Encephalitis Lethargica is not the fatal disease it is generally supposed to be, in our series of 77 cases, the deaths number 6, giving a mortality rate of 7.8 per cent.

Of the 77 notified as far as records are available 14 died.

Of these 14 deaths,

6 were certified as due to Encephalitis Lethargica.

1 was certified as due to E. L. 12 days. Erysipelas 12 days.

*2 were certified as due to E. L. but really died of Tubercular Meningitis.

1 was certified as due to Acute E. L. 2 days. Old [Tuberculous hip since infancy.

2 were certified as due to Carcinoma of Liver.

1 was certified as due to disseminated Sclerosis 9 years.

*1 was certified as due to Miliary Tuberculous Meningitis.

* Three Brothers.

It must be recognised that many of the cases are of only very short duration and unless very careful examination is made may be classed as influenza unless some important sequelae develop which throw further light on the original condition, just as in Scarlet Fever of the mild type, the subsequent discovery of desquamation throws an entirely new light on the otherwise unimportant sore throat or possibly transient rash.

Of the 77 cases, (where the notes were fairly complete) 60 have been analysed to show a relative frequency of the definite symptoms.

These differ slightly to the percentage given by Parsons in his Report in 1922, but his table refers to initial symptoms only.

By the kindness of Dr. Dupont, the Medical Officer of Health of Twickenham, I am able to show the location of cases arising in Twickenham adjacent to our southern boundary. These were seen by Dr. Dupont who agreed with the diagnosis.

The dates of the notification of these cases are given hereunder :—

Date.	Sex.	Age.	Ward.	
6/5/24	M	8	Whitton.	
13/5/24	F	35	Whitton.	
13/12/24	F	24	Central.	(London Road, near Ivy Bridge).
16/3/25	F	21	Whitton.	
23/8/25	F	Adult	Whitton.	
31/12/25	F	37	Whitton.	

One outstanding feature of these cases has been the large number with an antecedent history of worry, either at home or at work, or of a long continued strain of over-work.

A map showing the location of the cases and the chart illustrating the relative frequency of the definite symptoms are appended at the end of the record of the individual cases.

Case No. 1.

F. 40. Notified 14/12/20.

The outstanding symptoms in this case were sleepiness, accompanied by squint. General progression to death.

Case. No. 2.

F. 35. Married. Onset. 13/12/20. Notified 13/1/21.

The patient was at work up to December 20th 1920. Symptoms—commenced about the 13th. Felt "Muddled in Head". General weakness. Nasal catarrh. Slept well in contradistinction to her usual bad sleeping. She was noticed by the family to have ptosis. Temp. never above normal. Lethargy was very marked from the beginning. By the time the Doctor was called there was no ptosis, and no evidence of squint, nystagmus, or facial paralysis.

Mental condition quite clear when awake, patient stated she felt muddled. No tremors or speech changes. During convalesence the patient slept as badly as before her illness. Recovered.

Case. No 3.

M. 10. School. Onset 21/12/20. Notified. 13/1/21.

Initial symptoms—drowsiness, unable to keep awake, and blurred vision. On being roused "saw double". Temperature raised up to 102 degrees. Pronounced lethargy. Some ptosis, particularly left eye. Diplopia. Left side of face slightly weaker than right. Flexor muscles of L. thigh slightly weaker than right.

Mental condition was quite clear a few minutes after rousing. Pulse fell to 50 during the attack, returned to normal during convalescence. Some slight conjunctivitis.

Year 1925—This boy was a typical case of the serious after effects, his Headmaster reporting that he could do nothing with him. As there was some difficulty with the children in the district he was transferred to another school. At first there seemed to be

some slight improvement but the Headmaster eventually reported the boy's progress as unsatisfactory. He has now left school some time, and is doing nothing. He is a nice gentlemanly boy to look at, but in some respects is irresponsible.

Case No. 4.

M. 52. Boot repairer. Onset 3/9/22. Notified 8/9/22.

Was removed to Fulham Infimary on 5/9/22.

Initial symptoms—patient has been ill two years and has wasted. 2/9/22 complained of severe abdominal pains with vomiting and frequent evacuations. Had been constipated for one week before. Transferred to West London Hospital on 3/9/22. Next day began to talk strangely and his articulation was defective. Shouted incoherently and waved his arms about. Transferred to Fulham Infirmary 5/9/22. Patient very emaciated, skin dry and pigmented. Tongue furred. Some emphysema of lungs. Otherwise nil abnormal in lungs or heart. Temperature normal. Urine s.g. 1013. Slight trace of albumen. Pupils dilated, react to light—equal. No squint. Fundi normal. Abdominal reflexes normal. Knee jerks absent. No ankle clonus. Muscles of legs hypotonic. No facial paralysis.

Patient flexing fingers of right hand rhythmically with abduction of thumb, flexing and extending the elbow. Similar movements of less range in left arm (movements resemble those of a cobbler sewing a boot).

Patient pays no attention to questions. Tongue dry and lying in floor of mouth. Patient will not protrude it. Incontinence of urine. Bowels not open.

6/9/22. Patient semi-comatose. Lumbar puncture—C.S.F. clear under moderate pressure.

8/9/22. More conscious. Answers simple questions. Slight ptosis both eyes.

9/9/22. Very drowsy. Doubly incontinent. Loss of facial expression. Patient remained semi-conscious—lying in bed without movement although there was no paralysis until he died 14/9/22. Temperature rose to 102.4 on 13/9/22.

Result of exam. of C.S.fluid. Physical—clear, no deposit. Chemical—1 per cent. albumen. Globulin nil. Dextrose trace. Microscopical—V. few white cells—no more than in normal. No micro organisms. Wasserman re-action negative.

At P.M. examination. Brain excess C.S.F. congested—nothing else abnormal. Kidneys—early interstitial nephritis. Stomach walls much thickened. Ch. Gastritis—old healed pyloric ulcer with stenosis of pylorus.

Case No. 5.

F. 38. Onset ?. Notified 29/11/22.

The case was admitted to the West Middlesex Hospital. No records available.

Case No. 6.

F. 22. Milliner. Onset 20/11/22. Notified 13/12/22.

The illness commenced with a headache, pain in the back of neck, general malaise and lethargy, becoming more and more drowsy each day. She saw the doctor at the surgery on 21/11/22. Later went to bed and the doctor was called in on 25/11/22. Fever—3 days duration. Highest temperature 102 degrees.

For about 3 days speech became unintelligible. She afterwards stated that she knew everything that was going on but could not make any attempt at speech. The lethargy, which was quite definite for the first week gradually improved. There was slight double ptosis. No diplopia or nystagmus. The discs were normal with the exception of a slight retinal hæmorrage in the upper quadrant on the right side. Pupils reacted to light and accommodation. Corneal reflex normal.

The vision at one time got definitely blurred. The speech was more or less affected for 5-6 months. Retention of urine commenced on the fourth day after temperature became normal.

There was some dribbling incontinence of urine, and it was necessary to catheterise. There was also some loss of control over the rectum. This lack of control over the bladder and rectum continued to a lesser extent for 12 months, that is, she was unable to wait directly the desire to empty the bladder or rectum arose.

The mental condition at first was very drowsy. There was a marked tremor of the tongue and outstretched fingers. Reflexes-knee jerks brisk. No babinski. no ankle clonus. The headache persisted in paroxysms for some months.

When she got up it was noticed that her left leg dragged and this did not recover its full use for two years. Memory was affected to a certain extent in that she has a period of six months during which she has no recollection of what happened. There was considerable irritability which remained for about 3 years. Ultimate recovery apparently is complete. She is able to carry on her work as a milliner without difficulty.

Case No. 7.

F. 25. Onset ?. Notified 12/2/23.

The case was admitted to the West Middlesex Hospital. No records are available.

Case No. 8.

M. 27. Machine hand. Rubber works. Onset 5/4/24. Notified 7/5/24.

Initial symptoms—Giddiness. Three or four days later he found on looking to right, in right eye everything seemed to move. Referred to Eye Department at local Hospital. The Ophthalmic Surgeon's report was—" The eye symptoms complained of were giddiness on looking to the right, *not* diplopia. Examination showed nystagmus on lateralisation right or left, and pallor

of the O. D's., amounting to slight atrophy in the right eye in my opinion."

On one occassion whilst gardening on Easter Monday had a temporary diplopia. About 23/4/24 had an attack of yawning, drowsiness and feeling of tenderness lasting four days. Has been feeling weak all the time, but this was exceptional tiredness. No headaches until last two days.

The Medical attendant's notes are as follows :—

23rd April—complains of giddiness for a fortnight. No vomiting. No diarrhœa—nystagmus, more marked on looking to the right. 25th April—saw Mr. Loosely, Eye specialist—Optic atrophy found—says nystagmus is marked. Query cerebellar tumour. 28th April—pulse 72. Temperature 97.8. Complains of feeling sleepy yesterday—yawning the last two days. Saw double three days ago. Still nystagmus.

30th April—Not sleepy. Slight albumin and no sugar in urine. Knee jerks and ankle jerks normal. No ankle clonus. Plantar reflexes not obtained. Optic discs very pale.

2nd May—Syringed both ears clear of wax.

6th May—Sent to Queen's Square Hospital—Lethargic Encephalitis diagnosed.

7th May—Patient has been working up till now, but ceased working to-day. Pulse 72. Feels alright. Eating and sleeping well. Has never had pain in the back or head-ache.

10th May—Giddiness on moving quickly. A bit wobbly after walking a few hundred yards. No vomiting. Pain in epigastrium and also chest last night. No sleepiness. No more diplopia. Headache yesterday. Pulse 76. Still nystagmus. Feels giddy if he looks to the right when out walking.

15th May—About the same.

19th May—Headache yesterday and to-day. Right eye still feels a little bad. Wobbly after a three mile walk yesterday. Not irritable. The least excitement shakes him. Tongue and hands slightly tremulous. Recovered.

Case No. 9.

M. 31. Rivetter, Railway. Onset 19/4/24. Notified 7/5/24.

Initial symptoms—Pains all over; feverish; sweating; went hot and cold on 21/4/24. 22/4/24—sick. Very bad headaches. Sickness lasted 3 days.

The Medical Attendant's notes carry on from this date as follows :—

22nd April—Complains of sweats, giddiness and vomiting. Has been ill since the 20th.

26th April—Still giddy and weak.

3rd May—Better. Still giddy in the morning. During this time, 22nd April, to 3rd May, he had certificates to say that he was unfit for work.

7th May—Has not been to work. Felt pretty well, on the 4th Had retching and giddiness on the 5th and 7th—headache—trembles as he walks. If his head aches he gets tired as if he has done a hard day's work. As he walks along and looks at something, "he sees a whole string of them, until he blinks and then he is alright". Good nights, except on 3rd May. Sometimes "feels sleepy as anything". 2 p.m. to-day—could have gone off to sleep. Pulse 96.

12th May. In bed still. Pupils react to light and accommodation they look rather small. Tongue clean—was dirty at first and he had a horrible taste in his mouth and no appetite. He feels alright until 4 p.m., then is tired. Has pain in head. Doesn't feel like sleeping—it is a tired ache. No jumps or jerks. A bit weak in the legs on getting out of bed, as if he had been in bed for months. Eating very well. No vomiting. Sleeps comfortably.

15th May—About the same.

19th May—Better. He had an awful throbbing vertical headache on Saturday. Eating and sleeping well. Felt swimmy after 3 mile walk—was tired and backache. The backs of his eyeballs ached after the walk. No trouble with vision now. Good colour.

Recovered.

Case No. 10.

F. 43. Housewife. Onset 10/3/24. Notified 8/5/24.

The Medical Attendant's notes are as follows:—

29th March—Giddiness began three weeks ago and lasted for a week, alright the next week; giddy for this last week. No appetite, while giddy. No pain except in back of head and across forehead. Retching on getting up. Pain in lower back at first. No trouble with urine. She walked here, shook and felt cold as she came along. No numbness this attack. Seen double several times. Pulse 72 (Regular). Pupils react to light. Knee jerks very pronounced. Tendency to ankle clonus. Plantar reflexes extensor. Optic discs normal.

11th April—Better—can walk easily. Occasionally giddy on moving suddenly. Eating better. Evidence of ankle clonus. Three vibrations left ankle.

30th April—No giddiness or unsteadiness. Sleeping well except last night. Frontal headache all this week. Appetite good.

Recovered.

Case No. 11.

F. 19. Packer and sorter (Laundry). Onset end of April. Notified 15/5/24.

The attack commenced with irritability and the patient complained that her "head felt funny". Lost appetite, and constantly felt tired.

Chief symptoms—extreme languor, no appetite, drowsy during day. Sleeps badly at night. No headache or pain. No sickness, apparently no eye symptoms. Bowels regular. No bladder symptoms. Very terrifying dreams.

15/5/24—Had been in bed since 11/5/24, getting up once to go to the National Hospital, Queens Square, but returned to bed. Felt better in bed, but least effort tired her. Was fully examined at Hospital.

The mother stated that the girl seemed different, and looked changed, but could not be more explicit. She attributed the illness to the girl worrying over trouble at the Laundry—articles were missing, and everybody was more or less under suspicion in her department. The Medical Attendant stated that there had been no ptosis and no diplopia since he saw her. The diagnosis was confirmed at the National Hospital

The patient got rid of the dreams and went back to work packing and sorting, but used to lie down in the middle of the day at work. Later her right arm began to get weak, and on September 24th 1925 she was unable to tie up parcels with string. By November 1925 the arm was so weak that she had to be washed. There was subsequently some improvement until April, 1926, when she got much worse and everything had to be done for her. She has become very slow in her movements and very shaky; has no drowsiness now, but her face is completely masklike. The patient no longer has the terrifying dreams which were such a marked feature; sleeps well at night. but wakes up with bad headaches.

She now suffers from vertigo when looking down, and complains that if she looks up her eyes seem to get fixed.

This is a marked case of Parkinsonian after effects.

Case No. 12.

F. 21. Housewife. Onset 1/5/24.

This patient has just been confined in a small Private Maternity Home. The Medical Attendant's notes are as follows :--

Confined on 13th May, 1924.

15th May—Quiet and sleepy yesterday. Asleep every time nurse went into the room; just the same to-day. Nurse says she lies like a log. Eating well, but is very slow—has to make an effort. No vomiting. Giddiness to-day only. No pain in back. No diplopia. Tongue clean. Knee jerks and plantar reflexes normal. No ankle clonus. No nystagmus. Nurse says "colour of face goes green."

16th May—Slept well last night. Slept yesterday whenever she was left alone. Giddy occasionally this morning on turning head quickly. Not dizzy to-day before starting knitting. Pulse 84. Pupils normal. Looks a better colour, is brighter and smiles.

17th May—Alright first thing to-day. Giddiness appeared suddenly. When she closes her eyes things seem to be swimming about. Doesn't feel sick. Teeth have been aching. No headache. Can read this morning, but not very well—"words won't keep still." She jerks before she goes to sleep. Flexor plantar reflexes. No ankle clonus.

18th May—Still sleeps most of the day and all night. Eating well. Did her knitting all wrong yesterday, kept on forgetting. No pain. Doesn't feel sick. Giddy before going to sleep.

The case was not seen in consultation. Recovered.

Case No. 13.

F. 39. Midwife. Onset 14/5/24.

The patient was the proprietor of the Maternity Home in which the previous case was being nursed.

Onset—pains in the head and back of legs. Nausea. Vertigo and visual defects. She complained that all the things seemed to run into one another and she found it impossible to chart her temperatures.

The condition when I saw her was as follows :—

Pain in both sides of the neck, pupils small, knee jerks exaggerated slightly, ankle clonus on right side. Plantar reflexes increased. No babinski. She had some alteration in sensation, as an instance she " has to look to the ground to see if it is there ". Her facial expression was dull, (normally an extremely bright little woman). She complained of periodic pain across the eyes, and the eyes looked tired. Nausea. Memory gone.

The Medical Attendant's careful notes are as follows :—

15th May, 1924—This morning, dizziness on leaning over bed as if bed were coming up to her. Saw double last night. She went to pick up a cushion and it was on the right of where she thought. Things misty this morning. She feels sick. The feeling comes from above the sternum, cross each side of the neck to above the ears and then to the root of the nose; she feels she must grunt and she feels relief by doing it. She doesn't bring up any wind with it. She did this while I was there and then said she felt hot. No trouble with urine, not so much as usual. Usually passes quantities. She feels sick all the time. Eating fairly well. Slept badly last night. No sleep during the day. Pulse 84. She could not do her temperature charts to-day as she can't see properly.

16th May.—Still feels sick but is not so bad. Eyes not so heavy. Pains still come up to her head just the same but not so bad. They come a little higher up the back of the head and in front. She seems to hear a cracking in her nose. Things go blurred if she looks at them for long. Her calves are painful and sore just behind the fibula. Slept little because of baby. Feels muddled. Can't remember. Every now and then trembles as if frightened. The vibrations are not visible. She trembles as if in fear—just as she used to when the Matron went for her. She gets an effervescing in the lower abdomen—just as she does in a thunderstorm—as if the bowels are going to act. She holds herself tight, presses her arms for a minute and it goes off. Feels

irritable. Depressed, sort of crushed feeling for about a fortnight. Eye movements normal. She says a blur comes over her eyes as she moves them. Pupils look normal. Pulse 72. Right upper eyelid droops. She could not find her nose with either forefinger when her eyes were closed. Pronounced knee jerks. No ankle clonus. Flexor plantar reflexes.

17th May—She cannot do her charts—cannot read the thermometer. She nearly upset the dinner. Left forefinger aches as well as all up the outer side of the forearm. Something seems to pass in front of her eye on the right side from time to time. Has to hesitate before going upstairs—she has to make up her mind and go and do it quickly. She knocked her head last night. She had a sick feeling and had to "grunt," once to-day. Feels better. Slept last night. On leaning forward to pick up water jug she felt giddy and had a buzzing in her ears as she got up.

18th May—Alright to-day until 11a.m., then strange feeling that she was going to drop—lost all power. She seemed as if she must put her head on one side and fall over—her head feels like a weight—her hands were trembling. Can see clearer on the right side of her to-day. In to-day's attack she felt as if she were going to faint. She felt she wanted to shout. She feels more sick to-day. No feeling of pressure at the root of the nose to-day. Could go upstairs only after a rest. Things are blurred and shadowy. Her urine stains her clothes yellow. When told to find her nose with her forefinger, she put it half way up the nose with her left hand and at the root of the nose with her right hand. Has occasional twitchings of hands and legs—feels she must drop things. Has trembling feeling in the stomach. Slept well last night. Feels she would do anything to go to sleep in the day time. Pupils still small. Ptosis of right upper eyelid still.

Not seen in consultation.

Recovery in this case was very slow and the patient still finds her memory seriously at fault.

Case No. 14.

F.16. In Service (Nursing Home). Onset 6/5/24.

This patient had been having pain above the forehead for two weeks previous to the 2nd May—for one week had been weak and giddy. No vomiting or diarrhœa—very tired and was sleeping badly. Could not see to read when headaches came on. She had knocked her head against the window two weeks previously and a week later banged her head against a marble mantlepiece when lifting a coal scuttle. A few days after the second injury she began to see double and the headache got worse.

She was seen by a medical man and as a result of treatment was sleeping better. The headache was less but she still felt giddy and rather tired. Had to sit down for five or six minutes when giddiness came on. Her visual troubles were that she saw four or five of things at times and could not read for long. Felt very miserable. No twitching, except eyelids.—Stated she got frightened at times. Everything seemed a trouble. Had no pain in the back. Knee jerks normal. No ankle clonus. Plantar reflexes not obtained.

By 17/5/24 patient was sleeping better and eating fairly well. Had four attacks of giddiness. Eyes were feeling better. Went on to complete recovery.

Not seen in consultation.

Case No. 15.

F. 23. No occupation. Onset 15/5/24.

Patient had Rheumatoid Arthritis since November 1923. Had Influenza in March 1924 when she was feverish, felt extremely tired, weeping and being very morbid and miserable, and was in pain due to exacerbation of Rheumatiod troubles.

The onset was sudden. Whilst out for a walk she noticed a tendency to walk to the right and that the trees looked funny—not blurred but indistinct, as if they would fade away. The horizon seemed to be rocking, and she had an insane desire to

sit down in the middle of the road. Felt as if her legs wanted to give way. The doctor called that day in the ordinary course of events, and she complained to him particularly of giddiness. Temperature normal. Felt sick the next day but not worse. Nausea was sometimes worse when sitting still, sometimes when she was up and about. Had an attack of abdominal pain for about an hour that evening. No diplopia. Had occasional twitching of the left shoulder and right upper arm. She complained that her legs felt funny. Restless. Could not sit still for long. The following day she complained of sleeping very badly and a feeling of excitement round the heart. Still complained of headache. Stated that "All I want to do is to lie like this"—she was then reclining with her arms resting on the arms of the chair. Said "I lie like this for five minutes, then I have to get up again." Could not concentrate well when she was reading. Family noticed that she was getting irritable over little things. A day or two later she stated that she did not want to do anything, had a bad headache, could not read and had to close eyes to rest them. Had recurrence of abdominal pains. The eyes had a somewhat peculiar appearance. The difficulty in walking lasted for three days. Flexor plantar reflexes on left side, right side not obtained. No ankle clonus. Knee jerks brisk. Patient had troubled dreams. A few days after the onset she complained of a feeling of excitement inside, which she described as like the anticipation of a treat when a child. When sitting she wanted support as she felt she might pitch forward on her face. As the illness progressed she was still feeling giddy but improving. She found going upstairs a great effort. There was definite twitching of the face and the patient felt muddleheaded. The highest temperature recorded was 99.4.

Recovery was complete.

Not seen in consultation.

Case No. 16.

F.19. Employed at Dye Works. Onset 16/5/24.

As illustrating the difficulty in diagnosis, the following case

was notified and afterwards withdrawn as being a case of tonsillitis only. The symptoms given by the medical practitioner were as follows :—

16/5/24—sore throat, hurts to swallow. Giddy all day, not yesterday. Bad night—kept waking up. Legs very painful from hips downwards. Pain lasted a second or so and came on again in a few minutes. Not sick. Cold and hot. At back of pharynx follicules are enlarged. Small tender glands behind angles of jaw.

19th May—throat no better. Giddy if she turns her eyes the slightest bit, worse on turning to left. Had to come home from work to-day. Sleeping badly last few days. Appetite poor, can't eat. Feels ever so sleepy in day time, can't sleep at night, except on and off. No vomiting. Feels sick now and again. No jerking—legs give way. Has to hold head in hands when she is giddy and keep it still. Had operation on throat five years ago, as she used to make a funny noise. Now the noise starts again. Bled from the nose yesterday. Tremor right hand.

Case No. 17.

M. 18. Grocer's packer. Onset 15/5/24.

Onset sudden. Abdominal pain, profuse diarrhœa. Considerable headache mainly in the temples. Later pain in the back. No vomiting. Headache became more severe, and he felt giddy when he walked. A day or two later he was dizzy on bending, and his head throbbed badly. Got very drowsy towards evening, and could not keep awake. Complained that his eyes kept closing and were aching at the back. No Nausea. Pulse 86. Right eye bloodshot in lower quadrant. Knee jerks normal. No ankle clonus. Flexor plantar reflexes. Slept well that night. Tongue coated with white fur. The following day he had a bad frontal headache throbbing in character. Slightly less drowsy. Slight abdominal pain, still had diarrhœa. Looked weak and shaky. No tremors of hands. Complains that headache and weakness come on together suddenly, and that he must then sit down. He felt it

would be unsafe to ride a bike. Slight nystagmus also slight albuminuria. The following day the tongue was fairly clean. Patient looked drowsy and somewhat vacant. No alteration in character. Could then read. The drowsiness entirely passed away leaving him in his normal condition which was "bright, and had no idea of bed until midnight."

Recovered completely.

Not seen in consultation.

Case No. 18.

M. 53. Handyman, Building Trade. Onset 23/4/24.

This case was notified and ultimately withdrawn as being a case of carcinoma of the liver.

The Medical Attendant's notes are as follows :—

14th May—first seen to-day. For three weeks has felt sick all day. Sleeps well at night time. "No life" in day time. No diplopia. Slightly giddy after stooping. Urine thick. "Stomach feels choked right up". Bowels open. Tongue slightly coated. Temperature 98.4. ? Lethargic encephalitis.

17th May—about the same. Sick last night. Sick feeling after food "Was jolly tired—goes straight to bed when he gets in". Can't eat much. Lost giddiness. "Had a job to carry on to-day." Could lie down and sleep any time. Has been like it for three weeks. No pain or shivers or headache or jumps. Not angry, or irritable—just tired. Pulse 72. Conjunctiva jaundiced, he says for one week. Motions are light in colour. Urine deep coloured. Urine contained a little bile and no albumin.

19th May—went for a two mile walk yesterday—had a job to get home—so tired. Could sleep all day. Slept most of Saturday and Sunday and well at night time. He read yesterday. No diplopia. Very quiet—liver reaches down to umbilicus. No ankle clonus; Knee jerks normal, Flexor plantar reflexes. No giddiness now. Abdominal reflexes not obtained.

Not seen in consultation.

Died.

Case No. 19.

M.54. Painter. Onset 25/4/24.

This case was seen by one of the Medical Officers of the Ministry who was not satisfied that all other causes had been excluded and suggested that a Wasserman be done.

The history of the illness is as follows :—

25/4/24—Complained of headache and giddiness on returning from work.

26/4/24—Giddiness and headache worse, went to the Doctor. (walked to the Surgery). Vomited badly when he returned. Went to bed and continued vomiting at intervals through the night. Felt so giddy that he could not lie down with the back of his head touching the pillow, but hung his head sideways over the edge of the bed.

27/4/24—Sickness ceased, but the extreme giddiness persisted, particularly on movement of the head. He was in bed a week and gradually improved, the giddiness being the chief trouble. When up he had to move his head very carefully as if moved quickly he felt so giddy that he thought he would fall. When seen 21/5/24, was much better and hoping to return to work in a few days.

Bowels free. No other symptoms.

Two years later—says he has no ill effects at all now.

Case No. 20.

M. 56. Railway Clerk. Onset March 1924.

Had always been a nervy man.

In November 1921, was notified that he was to be superannuated. This upset him a good deal, although he was two years over the retiring age.

After that he had a series of attacks when he seemed to "lose himself" for a minute or so. These attacks, were said by his Medical Advisor, to be Syncopic in origin.

In April, 1923, he was sent for to return to the office temporarily, and remained at work until the onset of the present illness, March, 1924.

During August, 1923, his wife fractured her patella and was in Hospital for two months. She limped for some time after, which upset the patient considerably.

The illness commenced with vomiting and lasted for two days, leaving the patient very limp. Vomiting subsided for 10 days, then recurred with severe headaches and pain in left arm. Diplopia and great drowsiness commenced—commenced two weeks after the second attack of vomitting—at times delirious.

Would fall off to sleep whilst talking (drowsiness marked for one week). Very weak and tottering. Diplopia lasted for 2—3 weeks. Memory got very bad. Previous to onset very irritable, now extremely docile. During attack could not write, illegible, could not form letters. Intense pain down left side of head and extending down left arm, lasting for five days. Patellar reflexes present. Plantar reflexes, extensor. Pupil equal and active.

After prolonged convalescence, seemed to improve up to October, 1924, then he got more lethargic, and would sit or stand about in one position without speaking. The picture, expression. and general posture are those of a typical case of Parkinsonism.

His memory is getting worse and he is duite incapable of any sustained effort. Very emotional. Writing is now perfectly good. He is unable to express his thoughts in a letter. Apart from the condition left by his encephalitis, the patient's health is quite good.

Case No. 21.

F. 27. Midwife. Onset 23/3/24.

Had not been feeling well for some time. Previous to this had not had a day's illness in her life with the exception of some headache. The chief symptoms were diplopia and ptosis, with difficulty in seeing, and a large number of black specks which lasted for a week. She became very giddy, so much so that she was afraid to cross the road. Felt very tired and went to sleep frequently during the day. At first she could sleep at night but later could not sleep. Went away for three weeks. Could not sleep whilst away. Sleep became normal when she returned. At one period she had difficulty in walking—the ground felt "as if she was walking on air". Diagnosis confirmed by specialist.

Complete recovery.

Case No. 22.

F. 23. Onset 14/3/24.

Initial symptoms—giddiness, vomiting, haziness of vision, and general weakness. When first seen by a medical man was reported as unable to sit up in bed. Unable to see things in places (apparently 3 definite scotomata). Pupils slightly dilated but equal and reacted to light. Other reflexes, abdominal epigastric, plantar and knee jerks, equal active present and normal. Nothing abnormal in chest or abdomen. Suffered from sleepiness during the day and also during the night. Speech tailed off when patient was talking. Was admitted to Hospital as a case of Encephalitis Lethargica. Urine—acid. albumen present, no sugar. Pulse 60. Temperature 97. A Lumbar puncture was reported on as follows—4.5.24 Physical—Clear fluid. Chemical—Choride 0.819 per cent.; Sugar, normal; Total protein 0.04 per cent. Microscopical—Cells 5 per cubic mm, occasional plasma cell, rest are lymphocytes. Wasserman negative.

The patient was in Hospital for 6 months.

In September 1925, she was in the National Hospital, Queens Square. Progress was steadily downhill. At the end of November 1925 she presented the following symptoms—great wasting, lethargy, inability to open mouth apparently due to wasting of muscles (not to spasm). Pupil reaction slow. Knee jerks rather exaggerated. Tremor of lips. Total history down to the time of death practically two years.

Case No. 23.

F. 75. Onset 30/4/24.

This patient's eyes had been going wrong for 1½ to 2 years—left nearly blind. She complained of pain across the back and shoulders, with headache starting at the back and going over vertex. Also pains all over. No appetite, some sickness. Frequent attacks of vertigo, with intense weakness. Definite diplopia. She passed through a stage of the characteristic sleepiness. Weakness was the most marked symptom. Legs were almost useless for three weeks. She was so tired that she "could stand and go to sleep." Her medical man reported " I have known her since I came to Hounslow—years ago, and the change in her, mentally and bodily, brings me to think that she is one of the most marked cases I have seen."

Not seen in consultation.

Recovered.

Case No. 24.

F. 38. Married. Notified 10/6/24.

The outstanding symptom was intense and increasing headache. She was seen by a consultant and the diagnosis was confirmed. Convalescence was protracted. Recovery almost complete except for irritability, and loss of patience with small things which previously did not affect her.

Case No. 25.

F. 15. Domestic Servant. Onset 14/6/24.

Whilst doing her hair on the 4/6/24 she had an attack of giddiness accompanied by head ache. Had to sit down and was unable to go to work. During the day could not stand or walk. Had no sickness, diarrhœa, or sore throat. Constipated. Definitely complained of diplopia, and things looking black.

5/5/24—Was still giddy, could not walk, head ached.

6/5/24—Slightly better but still in bed.

7/5/24—Was got up but could not stand. Right foot gave way and she lost the use of it. Still complained of headache. No diplopia. The doctor was not called in until the 9th. No history of drowsiness. Could not sleep on the 4th, 5th, 6th and 7th. When seen by the doctor he reported that the vision had cleared to some extent and there was only a trace of haziness left. The "white edging" which she had complained of seeing in things had cleared up. Pupils dilated equal and reacted to light. Knee jerks present, equal and increased. Plantar reflexes present, equal active and flexor. No ankle clonus. Abdominal and epigastric reflexes normal. Abdomen and chest—nil. There was some night wakefulness. Was drowsy during the day on the 12th. This was not a very marked feature. There was considerable weakness, in addition to which she had a septic condition of the fingers and was sent to the Infirmary, and made a complete recovery.

Case No. 26.

M. 18. Onset 10/6/24.

The attack commenced with headache followed by giddiness a quarter of an hour later. No nausea. He fell off a ladder up against a wall, and was sent home. He felt alright in two days and went back to work, but two weeks later the giddiness began again, and he then had to sit down, as he was dizzy when standing up. No sickness, no sore throat. Complained that his legs felt

weak. Some temporary diplopia during attacks of dizziness. Later felt as if he wanted to sleep. Tongue was foul and there was constipation at each attack. Knee jerks normal. On asking him to touch the nose with the tips of his fingers he was unable to do it, the right hand touching the lip, and the left touching the tip of the nose but half way down the fingers. Slight lateral and vertical nystagmus. Pupils reacted to light but were small. Had tired looking expression.

There was an antecedent history of extreme worry in this case owing to a forced marriage being necessary.

Recovered.

Case No. 27.

M. 10. Schoolboy. Onset ?. Notified 12/6/24.

This boy had been under observation at the Clinic for about three years. The attack commenced with loss of appetite and headache three weeks before notification. He also had dizziness commencing about the same time, and was very drowsy, wanting to lay about. Seemed slightly better after he had had a rest. For one week after onset his mother noticed that he was very "funny," and during that time he went deaf. Also complained of temporary diplopia, which only lasted about five minutes.

Recovered.

Case No. 28.

F. 8. Schoolgirl. Onset 25/7/24.

The child seemed tired, heavy eyed, and was slightly feverish—Temp. 100.

27th July—Child complained of difficulty in swallowing. The doctor was sent for but did not think it was anything serious until the medicine which was given returned through the nose. Speech normal. Some slight pain at back of neck. Headache. No dizziness. She was seen by a consultant. For five days had

paralysis of the muscles of deglutition including soft palate. During the same period she was running a temperature. Had definite nystagmus.

Recovered completely.

Case No. 29.

F. 40. Onset 11/8/24.

This patient's left breast was amputated 12 months previously. The attack commenced four days before her admission to the Infirmary with giddiness, diplopia, and squint, vomiting, and severe headache. On admission her temperature was 98.8. Pulse 112. Respiration 30. Pupils sluggish external squint and diplopia.

15/8/24—Felt better. Headache not so severe.

18/8/24—Had another attack of vomiting, and from then improved generally as far as this attack was concerned.

The liver was found to be much enlarged which was evidently due to secondary deposits. Also nodules at inner end of incision.

From then onwards the patient slowly went downhill and died. from Carcinoma of the liver on 26/11/24.

Case No. 30.

M. 4. Onset 3/8/24.

This case turned out to be one of Tubercular Meningitis.

Died.

Brother of cases Nos. 35 and 38.

Case No. 31.

M. 31. Army Officer. Onset 3/8/24.

The main symptoms were severe pain over one eye, with ptosis on the same side. Pyrexia lasting about 5 days. Marked nystagmus. Facial paresis.

Was seen by consultant.

Complete recovery.

Case No .32.

F. 39. Housewife. Onset 1/8/24.

The principal symptoms in this case were giddiness, headache and definite nystagmus.

Completely recovered.

Case No. 33.

M. 51. Onset 13/6/24.

The only symptom was vertigo whic became so marked that he was continually falling about. No diplopia. Fibrillary twitchings of the muscles for some time. He was admitted to the West London Hospital where the diagnosis was confirmed.

Recovered.

Case No. 34.

F. 32. Onset ? 9/8/24.

This case was a very doubtful one, and was notified as such by the practitioner in attendance, the difficulty being that the patient had suffered from disseminated sclerosis for some years, of which she ultimately died.

Case No .35.

M.2½. Onset 13/8/24.

Brother of cases Nos. 30 and 38. Although notified as Encephalitis Lethargica, turned out to be Acute Miliary Tuberculosis.

One of the three had a post mortem examination. All three had a similar illness.

Died.

Case No. 36.

M. 18. Onset 12/9/24.

Initial symptoms—Temperature 103, headache. Apart from that no physical signs. He was admitted to the sick bay at the

Borstal Institute as a doubtful case of cerebro spinal meningitis. The next day the general appearance was much worse and in the evening he became confused in speech. On the following day, knee jerks were exaggerated, definite Babinski, and speech was markedly confused. Temperature 102. Vomited once, containing a little blood. He was removed to the local Hospital. On admission to Hospital was unconscious for three days. He was unable to drink, the food returning through his nose, and he was unable to swallow except with considerable difficulty. Very lethargic. Incontinuence of urine. General tremors but no paralysis. Had to be nasal fed. Pulse volume irregular varying between 60 and 84. Convalescence rapid.

The after results in this case are interesting, in that the boy underwent a marked change for the better both physically and morally, according to the staff at Borstal, and later he was promoted to the post of orderly, and became a keen albeit unsuccessful athelete.

Case No. 37.

M. 17. Onset 8/9/24.

Twelve months previous to the commencement of his illness, he had a cycle accident, when he collided with the tail part of a waggon, as a result he was severely concussed and was left with an upward squint in the Left Eye, with the result that when the head was held in a certain position there was definite diplopia.

Some time after the accident the boy had a very anxious worrying time, owing to the fatal illness of his mother.

About April 1924, he was subject to attacks of having to catch his breath, just as though he could not fill his lungs. This passed off and the boy was apparently alright until two weeks before admission to Hospital. He then complained of dizziness on more than one occasion, and his father had to take him out with him on account of this.

Seven days before admission to Hospital there was a good deal of dizziness with a temperature. Looked as though he was in for a cold.

Next day much about the same, possibly a little worse.

Next day about the same.

Up till now had taken food fairly well, almost normally. Next day no improvement, so was kept in bed. Some loss of appetite.

Next day total loss of appetite. Went without food all the day. In course of the afternoon was given a dose of liquid cascara and one hour later a cup of tea. These were vomited half an hour later. Another cup of tea was given in the evening and this could not be taken. No sleep that night.

The next day Doctor was called in and as he was unable to make a definite diagnosis, and there was no improvement, a second opinion was called in, but no conclusion could be arrived at. No food was taken during the day. About 6 o'clock in the evening an attempt was made to get him to drink some tea, and after a little persuasion, one mouthful was taken which was promptly returned through his nose. He was rather vacant in his manner and upset the rest of his tea.

Half an hour later, his father tempted him to take some more tea and was alarmed to find the boy more or less paralysed. He was unable to swallow, food returning through his nose when he attempted to drink, although his breathing was normal. He was unable to sit up in bed. His father sat him up and on turning round for the tea, found that the boy had simply rolled back—he stammered out "Daddy I can't." Stammering was a condition quite foreign to him normally.

No sleep that night at all. He laid with his eyes open and no movement of the body or limbs. Next day Doctor called and was unable to make a definite diagnosis the general picture being mainly "bulbar"; he was admitted to Hospital. He remained in the same

condition for 4 days when he was seen by the Consulting Physician, the condition finally being diagnosed as Encephalitis.

The patient on admission to Hospital was unconscious, this condition lasting three days. Incontinence of urine and offensive discharge from the mouth—jerking movements of limbs—unable to swallow and had to be nasal fed. Definite diplopia. Right side of face drawn up. Pulse irregular in volume varying from 60 to 72. He was unable to feed himself for several weeks.

The marked feature in this case was that during his convalescent period his language became very bad, and he was found writing filthy letters to his school chums.

He left the Hospital, but still had diplopia and had great difficulty in swallowing, having to take water copiously and frequently but was seized with a violent attack of coughing, and had great difficulty in regaining his breath afterwards.

Electrical treatment was carried on for some time with considerable benefit to the eye.

At the present time he still has trouble in swallowing in a somewhat lesser degree. He has to turn his head a half turn apparently to force the food down.

He still has to drink water abundantly with his meals.

The coughing and catching of breath is not so frequent although these attacks sometimes occur just after meals.

Apparently there are no moral after effects.

The boy is doing well in a scientific career.

Has developed normally physically and grown 10 inches in two years.

Case No. 38.

M. 8/12. Onset 15/9/24.

Brother of cases Nos. 30 and 35.

The Initial symptoms were vomiting and drowsiness. This child was admitted, as a case of Encephalitis Lethargica, into Guy's

Hospital. The case was ultimately diagnosed as Tubercular Meningitis and the notes from the Hospital are as follows :—

On admission was sleepy but quite intelligent, and there were no abmormal physical signs. Examination of the cerebro spinal fluid showed numerous lymphocytes. Protein .36 per cent. instead of a normal .02 per cent. No sugar. Showing general character of cerebro spinal fluid in tuberculous meningitis. Tubercle bacilli were not found in the sputum. A cultivation from the faeces gave a mixed growth of bacillus coli communis and enterococcus. An examination of the urine showed triple phosphate crystals only. No micro-organisms were detected. The cultivation gave streptococcus brevis and no non-lactose fermentors were detected. A diagnosis of tuberculous meningitis was made.

On September 30th there was a sudden change for the worse and the child became unconscious, and the temperature went up to 105 degrees.

The child died on October 1st.

The notes of the post mortem examination are given below :—

Brain.—Soft, and the meninges in the interpeduncular thickened. There were numerous small tubercles to be seen along the course of the middle cerebral arteries. The lateral ventricles were slightly distended.

Bronchial Glands.—Thickened.

Lungs.—Showed numerous miliary tubercles in all lobes and a fibrinous pleurisy.

Mesenteric Glands.—Caseous.

Ileum.—Showed several small tubercles.

Case No. 39.

M. 15. Onset 13/12/24.

Initial symptom was intense headache No sore throat. He was admitted to the Isolation Hospital the condition on admission being :—

Patient in a comatose condition, moaning slightly on being moved. Reflexes diminished or abolished, but extensor plantar reflex was present. Head somewhat thrown back but no real retraction. Muscular twitchings of the limbs, and also more or less continuous purposeless movements of the fingers. Pupils equally dilated, no reaction to light. Ptosis. There were no reflex signs present suggestive of Cerebro-Spinal Meningitis. Incontinence of urine and faeces.

Next day there was considerable difficulty in taking food. Lumbar puncture performed—no abnormal intraspinal pressure, fluid clear from the first drop. The report from the Lister Institute was as follows :—

"On microscopic examination no Tubercle Bacilli or other organisms were found The only cells seen were a few red blood cells. On culture only one or two colonies of non-pathogenic cocci have been found. The result of this examination does not exclude the diagnosis of Encephalitis lethargica as increase in the number of lymphocytes, which may be transitory, is the only abnormal feature shown on microscopic or cultural examination of the fluid in this disease."

23/12/24—Pupils less dilated and reacted slightly to light. Slightly less comatose.

25/12/24—Restless and incoherently talkative.

26/12/24—Slightly more drowsy during latter part of the day.

29/12/24—Getting weaker, quieter.

30/12/24—Died.

The highest temperature recorded in Hospital was 101.8. Dropped to normal on the 27th, and then below normal till the end.

Case No. 40.

M. 11. Onset 21/11/24.

Was taken ill in school with sickness and headache. Slept all night, and the next day was kept in bed. Seemed fairly com-

fortable, lay and read all day, and wanted to get up. On 23/11/24, he came down and took his food alright in the morning. Just before dinner he said he would go to bed as he felt so tired he could not keep his eyes open. The doctor was called in on the 25th as the boy was very feverish, and complained of pain in the back and neck, particularly on the left side. He did not appear to be very sleepy. In the course of the morning he became delirious, lost his vision and later became unconscious. He rapidly got worse and died the same evening.

He had been for three years in Hospital with old hip trouble.

The case was notified by the doctor as one of Encephalitis.

In view of the history there are grave doubts as to whether this was not a case of Tubercular Meningitis.

Case No. 41.

M. Medical Practitioner. Onset ?. 7/12/24.

The symptoms in this case were—pain over one eye with ptosis on the same side. Pyrexia of just under one weeks duration. Marked nystagmus. Facial paresis. Was seen by a consultant. Recovery complete.

This case lives practically opposite Nos. 28 and 65.

Case No. 42.

F. 66. Onset ?

Commenced with very bad headache, entirely frontal accompanied by "terrible" dreams, and would sleep at any time or anywhere. Later she had a fall when she felt numbed all down one side, after which she gradually became weaker and her memory began to fail. Six weeks later she took to her bed. She developed difficulty in swallowing and fluids regurgitated through her nose. Two days later tried to get up and had another fall. When she was picked up she was in a very helpless condition, but did not lose consciousness. Used to lay in a stupor for two or three hours at a time, and then would have intervals of two or three minutes in

which she was quite bright, and relapse into sleep again. She complained of no pain, and continued in this condition practically until her death early in January, 1925, and only lost consciousness a few moments before her death. I saw this case in consultation with the medical attendant.

Case No. 43.

15. School. Onset 5/2/25.

Onset—acute violent occipital headache, vomiting, no rigor but rapid rise in temperature with unconsciousness: Lethargy. Bilateral ptosis. Nystagmus. Temporary loss of knee jerks insomnia. Babinski. Squint.

Recovered.

Case No. 44.

M. 18. Ironworker. Onset 14/2/25.

Acute onset, violent occipital headache, vomiting. Rigors. No loss of consciousness. Concurrent attack of Lobar Pneumonia with pneumonic type of temperature. Lethargy. Bilateral ptosis, internal squint. Nystagmus. Temporary loss of knee jerks. Babinski. Headache.

Recovered

Case No. 45.

F. 13. School. Onset 5/3/25.

Gradual onset with slight evening rise of temperature. Severe headache and some vomiting. Lethargy. Ptosis. Nystagmus. Temporary loss of knee jerks. Insomnia. Babinski. Headache.

Recovered completely.

Case No .46.

F. 48. Onset 19/4/25.

The principal symptoms in this case were—headache, lethargy and weakness marked. Giddiness marked.

Recovered.

Case No. 47.

F. 63. Married. Onset 13/4/25.

The patient had had paroxysmal albuminuria for some considerable period. This illness began on 13th April 1925. In the middle of the night the patient had a bad rigor which lasted about an hour. On the following morning was very drowsy. and complained of headaches and feeling of sickness. Had difficulty in passing water—very scanty, and on examination it was found to be loaded with albumen. Patient became more drowsy—comatose. Towards the end of the week she was practically unconscious. Patellar reflexes were absent. She had plantar flexion of the toes. She was seen by a consultant who thought the condition was one of uraemia, and the outlook quite hopeless. About the following week the patient began to improve, the renal symptoms cleared up, the albumen disappeared, and she then began to complain of her sight—objects became indefinite and seemed to be much larger than natural. This condition continued, and she daily became more drowsy. She took her food very badly. About the end of the third week she began to suffer from hallucinations and delusions. These took took the form of seeing animals coming out of the pictures, particularly elephants, and animals feeding on the plants in the window. She had a persistent delusion that she was living on the other side of the road, and that people were attempting to steal the things from the house. She was seen by another consultant who diagnosed the condition as encephalitis. Later during the period of hallucinations she was seen by a third specialist as to her mental condition, which was such that he advised that she should be certified and placed in an asylum. Further delusions were that the germs of sleepy sickness when she woke up had come out on her skin and could be seen all over body. For three months her mental condition was entirely unbalanced. She was sent away in August with a Nurse, and at the end of the month returned home, her mental condition being practically normal.

No after effects.

Case No. 48.

F. 12. Schoolgirl. Onset April, 1925.

This patient's first symptoms of illness commenced in Easter week 1925. She got wet on Easter Monday, 13th April. A few days later she was taken queer with pains in the arms and elbows to the wrist, and in the middle of the back. Slight headache. No pain in legs. She was sent to the doctor on the 16th April, who thought she had fallen off her bicycle, but was not examined by the doctor at this interview. As there was no improvement, on the 18th April she was taken to another doctor, still complaining of backache and pain in arms. She was carefully examined and told to go home to bed at once, she was not fit to be about, and the doctor said that she was so bad that he should have been sent for and the child not brought out to the surgery. Hot soda formentations were ordered for the arms. The pain was so bad that the child was screaming at times. The elbow was said to be slightly swollen. Two days later the doctor called. The child was still in pain, and treatment was continued as before. Two days later the condition was much about the same. On the 23rd April she began to ramble in the night. She said she saw a monkey on the clock, and a man coming into the room, and a finger on the curtains. She jumped out of bed frequently during the night. No drowsiness during the day, but could not sleep at night. The following day and all night she was delirious, jumping out of bed. The next day she did not sleep all day and all night. The doctor saw her and diagnosed acute chorea. The child was still rambling that night. The following day she seemed much quieter, sleeping quietly on the night of the 26th April, so much so that the mother who had been advised the previous day to send her to the Infirmary, refused. On the 27th April the doctor called and as there was no real improvement in the child's condition, advised her immediate admission to the West Middlesex Hospital. The child was eventually removed to the West Middlesex Hospital on May 12th, the Hospital notes being as follows :—

12/5/25—Patient was admitted to the Hospital for Chorea.

Condition on admission—T. 99.2. P. 100. R. 22. Choreic movements of hands and face.

20th May—Patient is getting very dull and lethargic.

23rd May—Lumbar puncture performed, slightly tinged with blood at first, subsequently running clear. Pressure normal.

25th May—Child's mother says child has had squint for years. It is not a recent symptom. Before admission she was ill at home for about three weeks, she was "light headed" and was rather troublesome at home.

29th May—Seen by another practitioner.

18th June—Somewhat drowsy.

19th June—? Ery. Face. Developed definite Parkinsonian movements of both hands. Drowsiness gradually increased. Tongue very dirty. Nil throat. Knee jerks both very active as also ankle jerks. No definite ankle clonus. Negative Babinski. Abdominal reflexes normal. Nil—eyes. No myoclonus. Case appears to be one of the Parkinsonian type of Encephalitis.

20th June—Appears brighter. Has developed regular clonic twitching of both big toes.

21st June—Increased twitching of arms and legs.

22nd June—Drowsiness again increasing.

24th June—Parkinsonian gait now appears to be progressive. Not so drowsy. Temperature normal. Face much better. Still has clonic twitchings.

27th July—I.S.Q.

6th August—Still in bed, much better again.

28th August—Up again. Still tends to have Parkinsonian gait.

6th September—Not quite so well to-day.

18th September—Better again. Getting up. Being recommended for Convalescent home.

On leaving the Hospital she went to a Convalescent Home, but was there only 10 days. Owing to the child's Parkinsonian condition, there seems to have been some little difficulty with the other children and the child was brought home by the mother. She seemed to be getting on fairly well after she came home, but was still unable to walk properly. She could talk normally, looked vacant, but otherwise there was nothing obvious. The child did not seem to make any headway, and was taken to St. George's Hospital on the 4th January, 1926, and has been attending there ever since. About five or six months ago she commenced the habit of picking her nose and head and making them bleed, resulting four months ago in an attack of erysipelas spreading from the nose. Salivation was marked up to the middle of April 1926, but has now (June 1926) quite disappeared. She became worse about the end of May as no medicine had been obtainable owing to the strike, and was very emotional, crying a lot. depressed, and sleep was irregular. She now sits quite quietly, and can use her left hand, but the right is still weak. She is quite sensible and her memory very good. Her face is quite expressionless. Typical Parkinsonian after effects.

Case No. 49.

F. 41. Onset 20/7/25.

Languid after holidays June 1925, gradually had giddy turns come over her, in this condition 6 weeks before seeing doctor accompanied by severe headaches, mostly in occipital region, "seemed to feel as if it was in a grip." No sickness, no diplopia great anorexia. Had to hold on railings as she went along. Got so bad afraid to go into town. Fell down finally in corner of kitchen in one of the attacks of vertigo. Lost weight. Saw doctor who diagnosed Encephalitis Lethargica. Put to bed, seemed to go to pieces after going to bed. Couldn't see to read, or anything close to. Distant vision good, eyes got painful, felt as if lids pressing on globes. Head terribly bad whilst in bed, couldn't stand the least noise.

Didn't feel any illness in the body, only languid. No sleep for three weeks when in bed except as result of sleeping draught, and then rarely more than 2 hours. Memory got extremely bad, didn't return for nearly 3 months. In bed 5—6 weeks. When got up vertigo returned and only gradually disappeared after 10 months. Very shaky on legs after getting up. Headaches also bad. Glasses obtained which helped reading but did not ease pain. Still has to wear glasses. Went away for 6 weeks, much better and put on weight steadily (8 stone to 9 stone 7.) Couldn't stand any noise. No music in home for 6 months.

July, 1926, occasional pain in back of head, not eased by glasses. Now quite fit again. For a period very worried by trifles.

Case No .50.

F. 48. Onset 27/9/25.

The symptoms in this case were—vomiting for first few days, accompanied by severe headache and neckache. Marked weakness. Hallucinations. Loss of appetite for two weeks.

Recovered.

Case No. 51.

F. 38. Onset 5/10/25.

The symptoms in this case were—several morning rigors. Headache. Vertigo. Great weakness in the morning.

Recovered.

Case No. 52.

F 46. Onset 15/11/25.

This case was one of practically simultaneous erysipelas of the armpit, and encephalitis. One of the chief points in this case was the insomnia, and during the sleeping periods, bad dreams. "She sees men and people she knows." Could talk and think

alright, but when left alone after shutting her eyes for five minutes saw "awful men, hugh men, skeletons, "Can't stand it," must have a stick to keep people away." Nystagmus both eyes. Pupils small.

Patient died.

Was seen by London consultant and diagnosis confirmed.

Was Aunt of Case No. 28.

Case No. 53.

F. 66. Onset 1/12/25.

1st December 1925—The Medical Attendant's notes are as follows :—

(Urgent visit 8 a.m.) Pains all over. Dyspnoea.

2nd December—P. 140. Temp. 100 degrees. Deep expirations. Dry tongue. No food. Awake from 1 a.m. Much pain all over.

3rd December—Pain right cheek. R. Abdomen, and upper abdomen, between shoulders. No pains in limbs. P. 144—160. T. 98 degrees.

4th December—P. 124. Little sleep. Has seen people and heard them talk. They were going to take her away. Headache this morning. Giddiness on sitting up. Eyes felt stiff last night. Tongue dry and small. Slight nystagmus to right. T. 99.6.

5th December—Better night. No hallucinations. Slight nystagmus. Diplopia. Rest of C.N.S. Normal.

6th December—P. 132. R. 24. Rambling. Dirrahœa and vomiting.

7th December—P. 140. R. 32. T. 98.6. Hears choirs and sees things on shifting eyes. Last night was going down a lane with a very long turning and couldn't get back. Thought she made a dress just now and that someone took it away. Pain R. forehead to-day. Pain in abdomen on and off all the time. Picks bedclothes and fidgets (is always fidgety). Understands everything

said and does whatever I tell her. Noticed my glasses. No food since December 4th, water only. Double ptosis, nystagmus to R and L, marked.

8th December—P. 132. T. 98.6. Says she feels ill. Pain in head. Saw her dead mother yesterday (dead 40 years), and a dead son, (clearly). Heard singing. Always answers my questions intelligently. Talks to herself when not spoken to.

9th December—Good sleep last night.

10th December—P. 126. No pain. No visions or hallucinations. Slept most of yesterday. After this patient improved very quickly.

21st December—Face looks very different. Smiles, talks brightly, eats, sleeps and feels well.

21st January, 1926—Ptosis, lugubrious, somewhat slow mentally, speech slow, coarse irregular movements which cease at nights.

Recovery not complete.

Case No. 54.

M 5½. Onset 12/10/25.

October 19th 1925—"Sleeping all the time." Came home from school lay down on rug and went to sleep—sick several times that day been sick for weeks before that every time he got up in the morning. Was better till dinner time next day, but suddenly in the middle of dinner said "Oh!—dropped his knife and fork and went blue round lip and started trembling all over. Went stone cold "like marble" then put to bed and doctor sent for.

October 20th—Had three attacks (ten minutes). Could not stand—giddy when trying to stand. Could see alright. Very touchy, cried at least thing. Very drowsy, but did not sleep. Answered if spoken to, but only seemed to want to lie down with eyes shut. Looked strange at times. Frontal headache, and pain

behind right ear. Had a cold since Pertussis at Whitsun. Appetite bad. P. 137. T. 103 degrees (lasted about three days).

22nd October—Saw elephants in one corner of room and twice coming out of the pictures. Either crying or laughing. No diplopia.

23rd October—Had attacks of sobbing and laughing. 4 straight off. Trembling attack lasted an hour. Roars of laughter, saw elephants in the wall paper. Would not be left in room alone.

Heart, lungs and abdomen, knee jerks, plantar reflexes, and eyes, all normal. No nystagmus.

25th October—Much better. Slept well for two nights. Seemed quite himself. No laughing or crying attacks. P. 72. No nystagmus.

28th October—Looked bright. Talked brightly. Sat up. Eating better. Dirty tongue. P. 76. Marked nystagmus R & L. Pupils large

1st November—Sleeping and eating well. Dirty tongue. Perspiring at night.

The boy was in bed for 6 weeks. No paralysis. The after result was that the child became very exciteable and nervous, very frightened of trams and buses which he was not before. He wanted to be nursed some part of the day, and could not bear his mother going from one room to another. Went round the room lifting chairs for no purpose. More disobedient. Slept very badly. Spiteful—suddenly hit the baby or snatched things out of her hand. His mother stated he was "not the same child as before." When seen by the Officers of the Ministry he sat in a chair, his posture being like that of a paralysis agitans (January, 1926).

After this he improved considerably and in April, 1926, had a kind of relapse in that he became more troublesome, spiteful and disobedient, and again started purposeless actions as instanced by moving the chairs repeatedly.

Recovery not complete.

Case No. 55.

F. 65. Onset 18/11/25.

The main symptoms in this case were giddiness, headache and weakness. She was removed to the West Middlesex Hospital, three weeks after the onset of the disease, and was notified the day before she was admitted. The Authorities at the West Middlesex Hospital were unable to find any symptoms pointing to Encephalitis when admitted. Recovered completely.

Case No. 56.

F. 43 Housewife. Onset 6/12/25.

The onset in this case was acute. Headache, vomiting, rigor, followed by transient hemiplegia left side. Considerable lethargy, bi-lateral ptosis. Squint. Nystagmus. Temporary loss of knee jerks. Insomnia. Great toe extensor reflex.

Patient ultimately made a good recovery.

Case No. 57.

F. 25. Housewife. Onset 2/11/25.

The main symptoms in this case were—fever and rigors at the onset together with headache, giddiness, weakness and nystagmus. The occurrence of the attack brought on a mis-carriage.

Patient made a complete recovery.

Case No. 58.

F. 17. Onset 10/10/25.

For 7 days previous to being seen by the doctor, and more particularly during the last 3 days had been frightened to enter bedroom at night, and was afraid to go to sleep. Otherwise quite alright.

19th October—Headache. Feverish. Anorexia.

26th October—Not been sleeping at night, very sleepy in daytime. Still frightened to go into room. Headache over both eyes into temples. Was sick the previous night. Retching for 3 days. No appetite. Nystagmus R & L.

Pulse 80. Temp. 99 degrees. No giddiness.

27th October—P. 80. T. 98.6. degrees. Broken sleep. No p.s. C.N.S.—Nil except slight nystagmus.

29th October—Keeping well. Much better. Still headache. Can see clearly.

2nd November—Nystagmus marked. Sleeps more heavily and after meals. In bed for ? 11 weeks. Now up. Still has headaches and giddy attacks.

When seen later on 14th June 1926, patient had had to give up her work as a domestic servant, having been in a very light place where the mistress was a trained nurse, and working only until lunch time, then going home and sleeping till about 5, returning to work at 5.30, and leaving about 8.30. This she had to give up three days before being seen. She is still very drowsy during the day, and complains of always feeling tired. Still has frontal headache which is not in any way relieved by glasses. Face is somewhat expressionless, and there is still slight lateral nystagmus. Her condition was such that whilst she was at work she was constantly worrying over the possibility of dropping things, and things not turning out right which she had to cook. She is still unable to face a crowd, and has not travelled anywhere since her illness.

Case No .59.

M. 20. Shipping Clerk. Onset 16/10/25.

The illness commenced with diarrhœa, after which he felt ill but continued working. Whilst at work he felt dizzy, and felt as if he would faint. Had recurrent attacks of palpitation. The Chief Clerk in the office died and this upset him considerably. He

became worse, could not keep still—had to keep walking about. On 29th October he went to business but could not write, felt so ill that he was brought home by a fellow clerk, as he could not trust himself. Seen by a doctor on 31st October. Pulse 120. Temp. 99.4. Could not concentrate. Depressed. Anorexia. Weak. No p.s.

1st November—Pulse 66. Temp. 97.8. Felt well. 10 p.m. Had an attack of shaking with tachycardia. Felt as if he was going to die after waking up from sleep and had a bad dream. No nystagmus or abnormal physical signs.

2nd November—Slight nystagmus. Had a little sleep.

4th November—Pulse 66. Temp. 97.4. Slightly jaundiced, but no bile in urine. No headache. Not giddy in bed.

After that he varied from day to day, sometimes feeling well, sometimes giddy and too weak to move. Had tremors of hands at times. Gradually improved and could walk about 10 miles. One of his periodic complaints was that at times everything he saw used to annoy him. The boy was very nervous, working a lot in the evenings as a student, but had no worries either at home or at his work.

21st January, 1926—When seen on this date, pupils were much dilated, 3rd nerve affected. No nystagmus. Slight tremor of hands Knee jerks brisk.

Recovery in this case was complete, and he has since been promoted in the Office.

Case No. 60.

F. 18. Domestic Servant, Onset 11/11/25.

The initial symtoms were headache, lethargy, giddiness and some retching. These symtoms persisted for nearly three weeks. Later was costive. No ocular symtoms.

Recovered.

Case No. 61.

F. 11. School-girl. Onset 16/10/25

In September, 1925, this child had been transferred to a new school. Seemed upset by the change, had headaches and some loss of appetite. Was seen by the family doctor and kept away from school until November11th, on which evening she complained of seeing stars and black specks in front of her eyes, and mistook her bedroom, going into another room. When going to bed she complained that her right arm felt weak. The mother left her in bed and returned in a few minutes to find the child very distressed, trembling all over, tears rolling down her face, and trying to speak but unable to do so. After 15 minutes speech returned, was very jerky, but gradually improved. Later that evening the child vomited. The arm was still weak but recovered next day. She was kept in bed for fourteen days, had slight headache, slept fairly well, and appetite was fair, slight giddiness, bowels and bladder normal. after getting up kept fairly well, but was very nervous and seemed terrified of another attack.

21st January, 1926—Speech still slow. Some slight asymmetry of face, weakness on one side.

Recovered.

Case No. 62.

F. 44. Housewife. Onset, September, 1925.

The patient had been sleepy apparently for one month or so before she saw the doctor. Would go up to bedroom and go to sleep on the bed. Initial symptoms—pains in back and neck, bad headaches and lethargy. Towards the end of October she fainted, and afterwards vomited, and vomited again later in the day. Felt very ill all the next day and went to the doctor, 30/10/25. Temperature was 101.4. Pulse 84. Dirty white tongue.

31st October—Temp. 100.2. Pulse 84. Had a bad night. Headache rather less.

1st November—Temperature 100.6. Pulse 72. Marked nystagmus.

2nd November—Nystagmus marked. No giddiness. Diplopia. Slight headache. No appetite. Nasty taste. Complains of pain in legs.

4th November—Temperature 99.2. Pulse 84. Urticarial rash on fore-arms only. Complained of pain in eyes and stiff neck.

5th November—Nystagmus present. Tongue cleaning. Eating a little but without appetite.

Whilst in bed perspired very freely. Brain condition fairly clear. In bed for about a week. Periods had been rather irregular during illness. Had always had bad headaches during the periods. Was very weak for some weeks afterwards, but no dizziness. She did no housework from the begining of November until December 18th.

21st January, 1925—Nystagmus had gone. Felt quite well. Two weeks previously had been sick and had an attack of giddiness. Two children in the house had had headaches and sore throats. Previous health had always been good.

Recovered.

Case No. 63.

F. 54. Housewife. Onset 12/12/25.

10th January, 1926—Patient had not been well for a year.

About Christmas time had pain in the back for four days, and could not turn in bed. Had been ill since then, but eating ordinary food. Complained of headache, gidddiness, and bad dreams. This was the first day on which she was seen by the doctor. Tongue was clean. Pulse about 70. Had some diarrhœa, which was probably due to castor oil.

11th January—Pulse 92. Temperature 99. No appetite. Clean tongue. Eyes kept closed. Had been like this for several days. In bed in darkened room. Complained of heaviness of the head. Felt as if she was going up and down (stated that she had felt like this for several weeks.) Also stated that for two months she had been unable to see things clearly with her glasses, and complained of black spots and bright lights in front of eyes. Patient also had horrible dreams.

12th January—Was slightly better.

13th January—Had a good night. No headache, but felt heavy. No Nystagmus.

15th January—Complained of feeling giddy.

17th January—Muddled and drowsy, but better. Tongue clean.

21st January—Conjunctivitis. Double ptosis. Photophobia. Typical speech. Some irritability and obtuseness.

Six months later—Now memory very bad. Head still bad. Can see better, ? glasses want altering. Still bothered by things but improving steadily. Has had a month's good holiday. Housework more bothering than before, much more bothered by a definite job that has to be done. Gets on her nerves. Looks worried. Parkinsonian attitudes.

Case No. 64.

F. 44. Housewife. Onset 11/12/25.

For about a week before calling in the doctor, patient had had some soreness of the throat. She was first seen by the doctor on 15th January, 1926.

Was stated to have been ill since two weeks before Christmas—headaches, weakness, depression with bad nights, nightmares. Sleepy by day. Pain in the right side of the head (front, top and back), and back of the right shoulder. Appetite had been poor, but patient had been eating until this date. Some smarting on micturition. Sight for near things had been worse for the last few weeks. Could not do needlework. Bright lights in front of eyes. Patient could cry easily. Pulse 77. Temp. 98.4. Heart, lungs and abdomen normal. Slightly tender right iliac fossa. Knee jerks slight. No A.C. Flexor plantar reflexes. Left abdominal reflex not obtained. No nystagmus.

16th January—Had a better night. Head swimming a little. Better. Headache still present. No abdominal pain.

17th January—Head very bad, very swimming. Smarting on micturition.

21st January—Coarse nystagmus. Tired, lethargic. Said she seemed to be floating in mid air. Euphoria.

In bed 12 weeks all but 2 days. Memory very bad indeed. Headaches were very bad. Pains round stomach and back, almost as bad as labour pains. Dr. had to be sent for specially. Recurrent attacks, not giddiness, but something seemed to come over brain, just like a wave. For a few seconds seemed to lose power, a sense of pressure on the brain. The attack leaves her quite prostrate for a few minutes.

Now six months since the commmencement of illness, very weak, with constant pains in middle of back. Has pains in hands, arms and hips like rheumatism. Still sleeps very badly. Always tired in day but can't sleep. Can't settle to anything or rest properly, appetite very poor. No taste since illness. Very irritable with little things. Daughter says mother now bad tempered, before was a very patient kindly woman. Now wearing glasses, as gets headaches without. Eyes very painful especially left which gets quite misty at times.

Previous to her illness patient had mastitis both breasts at 2 year intervals. Intense worry, due to desertion by husband. Patient thinks condition largely due to nervous breakdown from worry.

Case No. 65.

M. 40. Fishmonger. Onset 1/1/26.

Was quite alright when he went to bed on December 31st. Woke in the morning with very bad frontal headache. Is subject to occasional headaches which clear up rapidly after a cup of tea. In this case, headache continued all day, and for several subsequent days. About dinner time on the day of onset he felt as he was bending down as if something seemed to strike him at the bottom of the spine. He described it " Like the kick of a mule." The pain seemed to travel right up the back to the head. He went very dizzy, everything seemed to be moving round. No sickness, no pain, other than in the head. He was got to bed and the doctor called in. He slept a considerable portion of the time whilst in bed, except during the first week. Whilst awake during the day he felt exactly as if someone was pulling the top of his head off. Two or three days after being in bed he noticed things went misty at

times and always when he tried to read, the letters ran into one another. He could not bear the light on his eyes at all. He was very shaky the first week he was up, and had difficulty in standing. Pain in the hamstrings after walking. He had well marked vertical and lateral nystagmus, especially lateral. Convergence good. Knee jerks slightly increased but sluggish. Bi-lateral ptosis together with some 3rd nerve paralysis. Great toe extensor reflex.

Recovered.

Case No. 66.

M. 35. School teacher. Onset 1/2/26.

Subject to Rheumatism. Had occasional pain in legs since going into a new house which was not completely dried out. Headache commenced 30/1/26, mostly in occipital region, severe. He laid down and the headache went away. Next morning he felt better and went to work. At noon the pain re-commenced but he carried on until he came home and went to bed early. No sickness, no dizziness. Put on an extra blanket and sweated profusely, and pain left his head and commenced in the legs and arms. Went to work the next day with a certain amount of pain. Headache came on again during the day, more severely than the day before. Went to work the following day, the headache started almost as soon as he left Hounslow, and became so bad that he came home. The headache was behind the eyes and nose, and also in the occipital region. No history of visual troubles. Pain in the head was very acute next day, and the doctor was sent for. The next day the pain in his head lasted for 5 to 6 hours in the middle of the day, after which he felt alright. It was the same on the following day but gradually getting less. He managed to take his food alright all the time except on two days. Bowels regular. No hallucin-

ations. Said he felt himself a fraud. When seen had definite Nystagmus, rather less in the upward direction.

Recovered.

Case No. 67.

M. 6. School. Onset 11/12/25.

This boy appeared at the Clinic on the 29th January, 1926. His illness started 3 weeks before Christmas. He came home feeling very drowsy and went to sleep directly. Complained of great frontal headache for two or three days. No sickness. There was a doubtful history of ptosis. He did not attend school as he could not keep awake. He was more or less drowsy all the holidays, but improved towards the end and went back to school. He was only in school a week before the headache commenced again. After that he became very drowsy again, sleeping at odd times, once or twice going off to sleep in the middle of a meal. Speech was slow. There was some weakness of the left side of the face. He had got very irritable with the children. When seen again on the 12th February, he was much better; the headache had disappeared, and he was less irritable. On the 12th March he had considerably improved generally, was sleeping and eating well and not so irritable. He still complained of headache.

On the 30th April the boy was much better on the whole, no headache, no irritability. Had definite weakness and loss of tone of muscles of whole of left side of face.

On the 28th May he was greatly improved, in the mother's words was "Wonderful this last four weeks." The condition of the left side of the face was much the same. There is a question as to whether a part of this difference is not a congenital asymetry.

Case No. 68.

F. 39. Onset 15/1/26.

Patient was quite alright up to the middle of January, 1923, when the neighbour noticed that she looked very strange (vacant) She used to say she coud not see the neighbour properly, and turn her head away. Used never to go out without speaking to neighbour, but lately had not done so, which was a most unusual state of affairs. She became very uneven in temper. During the middle of February her condition altered for the worse, was very poorly all day and her head ached terribly. She complained that she could not see properly, and staring at anything made her giddy. For a week or two before this stated that she could see two of everything when she was reading, but there was no complaint of diplopia otherwise. Also said she felt a bit funny lately. Went to the doctor, and completely collapsed on her return, trembling all over. The neighbour said in describing it that she had never seen anything like it in such a short time. This apparently resulted from the fact that the doctor had told her that she had got Encephalitis, and must go home and go to bed at once. She apparently fainted when she got upstairs, and was more or less unconscious save for short intervals, for a week. The main symtoms which developed were lethargy, mask like face, insomnia, loss of appetite, giddiness, and she also developed athetosis, plucking at the bedclothes, definite intention tremors, with a certain amount of tremor at rest. Recovery was slow, the patient complaining of headaches and difficulty in walking. Daughter of case No. 53.

When last seen (14/6/26) patient was still complaining of black specks in front of her eyes, and if she is walking along and meets anyone, she describes it as though their face was one blank. She still feels very weak and has to lie down, as her back is so bad. The only work she is capable of is dusting out a room, and cooking.

Case No. 69.

F. 43. Nurse. Onset March, 1925.

The initial symtoms were intense headache—particularly in back of head and neck, some stiffness of neck, marked photophobia, and some diplopia, and severe and intractible insomnia. Slight rise of temperature, occasionally up to 100, pulse rate not slowed. Ali reflexes present, but somewhat exaggerated (this the medical attendant thought to be normal for this patient, as she is very neurotic). Some slight change of mentality—tending to irritability. The most prominent and persistent symptoms were the pain in the head and insomnia.

The patient subsequently had an attack characterised by persistent pain in the back and headache, with some nervous symptoms which looked very like a relapse, but in view of the patient's neurotic temperament there was considerable difficulty in making an accurate diagnosis. She was transferred to St. Thomas's Hospital under Dr. Buzzard, when the conclusion was come to that the symptoms were considered not to be due to encephalitis.

After leaving the Hospital the head ache and pain persisted, and she was seen by another doctor. It was found that she had multiple tumours in both breasts which were removed.

Subsequent history will be watched.

Case No. 70.

M. 14. School. Onset 19/2/26.

The symptoms given by the Medical Attendant were Lethargy bi-lateral ptosis, 3rd nerve paralysis, squint, insomnia. Great toe extensor reflex. Recovery apparently complete.

Case No. 71.

F. 47. Onset 14/1/26.

The illness commenced with pain in the back and great depression, and the patient was afraid to go anywhere. Could get no sleep at night, and gradually got extremely drowsy during the day. Headache mostly at the back, and later she was unable to read or knit, and developed definite diplopia which lasted for 6 or 7 weeks. This was accompanied by definite squint. She was in bed for two weeks, and then about the house for some time. Was under the doctor for three months in all. In the early part of the illness she vomited on and off for about one month. During that time she had no appetite whatever.

On the 4th June, 1926, when seen she stated that she still gets headaches, often feels very languid and depressed, and feels as if it is the old trouble coming on again. She is able to do her housework with difficulty.

Case No. 72.

F. 57. Midwife. Nurse. Onset, about 15/2/26.

Feeling terribly run down before Christmas, 1925 Had been attending a case of Cancer which had been dying all the summer. Complained of feeling terribly tired, as she put it "out of the way tired" compared with what she had done. She used to feel as if she could lie down and sleep for ever. She never gave way, but was unable to sleep at night, would sit up until 2 a.m. sewing or reading, but could not go to sleep. This went on until February, and she was getting more and more tired every day. On 12/2/26, she was taken suddenly ill with great pains in the side of neck and back with intermittent diplopia. The pains in the neck she said were terrible. The pains lasted 4 days and seemed to drag her head

forward. Diplopia lasted on and off for two weeks, (two days on and then a day or so free). On the whole, the chief difficulty later on was her back, which she could not bear to be touched, and could not lie down. When she could lie down, she had great difficulty in getting up again as her neck and back seemed so stiff. Had a good deal of constipation for two weeks. No sickness. Felt very faint when she began to sit up and very weak. As she put it she felt "really ill" for a week. Two months later there was no Parkinsonism, but the patient still felt shaky.

Case No. 73.

F. 22. Onset ? 1/4/26.

This patient met with an accident on the 19th December, 1925, crushing her finger at a factory. The finger was amputated the same day at the West London Hospital where she attended daily until 19th January. The hand by this time was getting septic—profuse discharge—the patient being very ill. Three incisions were made one in the stump of the finger, and two in the back of the hand. Owing to her condition, in order to avoid the daily journey to the West London Hospital, she was admitted to the Hounslow Hospital and was in bed for three weeks. The condition cleared up and she came home and attended daily. The mother at this time noticed a difference in the daughter who complained of bad headaches, and irritating cough. She became very languid, lying about, and had no energy. She was treated by the doctor for the general condition.

On 1/4/26, she was very languid and off her food.

4th April.—Went out for a walk. Came home very tired. Seemed worse. Still complained of headache. Vomited later in the day. The headache got much worse all that night.

5th April.—Head worse. Not so very drowsy.

6th.—Doctor was called in again. Patient was then in a very lethargic condition, lying all day with eyes closed. Rambling towards night, answered quite intelligently when spoken to. No incontinence. Remained much the same as this until April 9th. Complete constipation for six days.

10th April.—Bowels moved. Got out of bed herself whilst the mother was downstairs. Had apparently soiled herself considerably and was found getting into bed in a clean nightdress, and had no knowledge of what she had done. From thence onwards she was quite helpless, took food fairly well until April 12th, when she had to be fed. Became more and more lethargic and could not answer questions intelligently.

16/4/26—I saw the patient on this day at the request of the medical attendant as a possible case of Encephalitis Lethargica. She had obvious squint (commenced on 13th April), incontinence from the 15th April, opened her eyes and looked around but could not recognise anyone. She was gradually getting more and more drowsy. The condition seemed very serious and I advised her removal to the West Middlesex Hospital, the condition appearing to be one of Encephalitis. She was removed to the Hospital and died the next day. In view of the injury and long protracted sepsis one ought to bear in mind such conditions. The Medical Superintendent at the Hospital considered after careful consultation with his colleague that there was no doubt that this patient was suffering from encephalitis.

Case No. 74.

F. 17. Onset 11/1/26.

During the middle of December, 1925. this patient complained of being cold and sleepy.

12th January, 1926-Took a definite turn for the worse, was very drowsy and wanted to keep crying. Had slept very heavily the night before. Her appetite disappeared and she vomited. Tongue clean. No fever, giddiness, or headache. Slight nystagmus to the left.

14th January.—Complained that her vision had been hazy for the past two days.

18th January. Felt alright except for her head—complained of a dull pain across the eyes. Continuous feeling of nausea. Felt irritable and angry and has done so for a week. Everything seemed to annoy her, and she wanted to have a good cry. Nystagmus was then well marked to right and left.

21st January.—Still slight nystagmus. Knee jerks increased. Fixed expression. Said she still saw things mistily.

Recovered.

Case No. 75.

F. 36. Onset 25/3/25, about.

This patient had been seen in 1925, by a medical man with an attack which had apparently been called Influenza. She had not been so well again and had been to another doctor on account of headache and dizziness. In December, 1925, she complained of being very sleepy when coming home from work and could not sleep at night. No sickness. Had curious hallucinations—when she closed her eyes thought she was looking at liver. Headache almost entirely frontal, and were so bad that she thought she was "going

mad." Also complained of pain in the side, but there was a history of definite pleurisy in 1925. No cough. Kept at work all through original illness, and had not complained of diplopia. Had recently been in bed for a week, and was said to have had anæmia very badly. This was due to great increase in menstrual periods which had existed during the previous 18 months.

When seen later she was very trembly, with a rather twitchy face, and was very emotional. Felt as if she could not control her legs when walking and complained of getting fearfully depressed. The symptoms seemed to be definitely worse, her facial expression more or less fixed, also definite loss of memory. when seen on 21st January, 1926.

Case No. 76.

M. 26. Packer in Soap Factory. Onset 11/10/25.

The illness commenced on the 11th October, 1925, with attacks of laughing and crying. Patient was extremely irritable, with a week's history of headache, the pain coming up from the back of the neck. During this time his character apparently changed considerably. Had a bad dream on 10th October, and woke up laughing. Had 5 attacks in 20 minutes. On examination—no diplopia, and no nystagmus. Complained of spots in the front of his eyes. Central nervous system—nil, except knee jerks very brisk and abdominal reflexes brisk. Appetite good.

12th October.—Complained that his sight was funny. There was no blurring or diplopia. Said that "People walking away appear to be running." Had terrible headache on reading, and had to fight to prevent laughing. Temperature normal. Some albuminuria.

14th October.—"Terrific headache" the previous night across both eyes and over, which was worse at times and especially on stooping. No laughing or crying on this day, but still had periodic headache and could not read for more than five minutes. Was still flying into a temper on the slightest provocation. Appetite had disappeared. Tongue was dirty. No eye signs. Felt alright between headaches.

15th October.—Had slight headache. Appetite good. Less irritable and sleeping alright. No laughing or crying. Reading caused severe pain in the left forehead, also in the left eye. and later in the right eye. Came over very weak when walking. Easily out of breath. Looked bright.

19th October.—Felt alright. Eating ravenously.

20th October.—Appetite lost again.

24th October.—Headache again. Great perspiration all over. Very short winded. No nystagmus.

27th October.—Eyes looked glassy.

11th November.—Felt comparatively well.

21st January, 1926.—Back at work. No physical signs. Pupils large.

Recovered.

Case No. 77.

F. 25. Domestic Servant. Onset 2/1/26.

The illness in this case commenced with neuralgia on the right side of the face and in the eye. Was seen by the doctor on the 7th January. She fainted two days previously.

Case No.	Headaches.	Lethargy.	Insomnia.	Vomiting.	Constipation.	Diarrhoea.	Anorexia.	Nausea.	Foul Tongue.	Diplopia.	Ptosis.	Conjun.	Squint.	Nystagmus.	Visual Defects.	Vertigo.	Delirium.	Fever.	Rigors.	Loss of Consciousness.	Faintness.	Stiffness.	Tremors.	Incoordination.	Paralysis.	Deafness.	Change in Speech.	Change in Character.	Pain.	Sore Throat.
1			x										x																	
2		xx									x																x		
3		xx	x							x		x			x			x							x		x		
4				x		x			x								x											x	
5																														
6	x	x									x				x			x					x		x			x	
7																														
8		x												x		x							x					x	
9	x	x		x												x		x					x					x	
10				x			x		x	x						x												x	
11		x	x				x									x									x		x	x	
12		x														x						x					x	x	
13			x					x		x	x				x	x							x	x	x			x	
14	x		x												x	x							x				x		
15	x	x	x					x							x			x					x				x		
16			x				x									x	Not E.L. (Tonsilitis)						x					x	x
17	x	x				x			x			x				x							x					x	
18		x		x			x	x								x	Not E.L. (Carcinoma of Liver)												
19	x			x												x	Doubtful ? Specific												
20	x	x		x						x							x							x				x	x	
21	x	x	x							x					x	x														
22		x		x											x	x							x		x		x			
23	x	x		x	x		x			x						x												x	x	
24	x	x																										x		
25	x	x	x							x					x	x												x		
26	x	x			x				x							x								x						
27	x	x					x			x						x									x			x		
28	x													x				x							x				x	
29	x			x						x			x			x														
30		x		x														x	x	Not E.L.								T.B. Meningitis		
31											x		x					x							x				x	
32	x													x		x														
33																x							x							
34																	Disseminated Sclerosis. Died													
35		x		x														x		x	Not E.L. (T.B. Meningitis)									
36	x			x														x		x		x		x		x				
37	x	x	x	x			x			x						x		x										x		
38		x		x														x		x	Not E.L. (T.B. Meningitis)									
39	x	x									x						x	x				x		x					x	
40	x	x		x											x		x				? T.B. Meningitis								x	
41											x		x					x							x				x	
42	x	x	x																						x					
43	x	x	x	x							x		x					x		x					x					
44	x	x									x		x							x					x					
45	x	x	x	x							x		x					x							x					
46	x	x														x														
47	x	x		x													x		x	x			x			x				
48	x	x	x						x						x		x	x					x		x		x	x		
49	x														x	x														
50	x			x			x										x	x											x	
51	x															x			x											
52			x											x	x		x													
53	x		x	x		x			x		x			x			x	x					x			x		x	x	
54	x	x	x	x													x	x										x	x	
55	x															x														
56	x	x		x							x			x					x						x					
57	x													x		x		x	x											
58	x	x	x	x				x						x				x												
59			x				x							x		x							x	x						x
60	x	x		x												x														
61	x			x											x	x		x							x					
62	x	x		x						x	x		x	x				x											x	
63	x											x	x		x	x										x			x	
64	x	x	x					x						x	x														x	
65	x													x	x	x		x											x	
66	x			x														x					x		x					
67	x	x										x													x		x	x		
68		x	x				x			x						x	x						x		x			x		
69	x		x							x					x			x	Doubtful Case									x		
70	x	x	x								x		x					x							x					
71	x	x	x	x			x			x			x															x	x	
72		x	x		x					x													x	x					x	
73	x	x		x			x				x		x				x								x					
74		x						x						x	x										x					
75	x	x	x													x							x				x			
76	x										x																x			
77	x	x	x							x		x				x							x	x			x	x		

10th January.—Fainted again. Very trembly.

11th January. Trembling again. Had pain over right eye.. No giddiness. Appetite fair. Slept poorly. Very weak by dinner time. Tongue clean. Slight nystagmus.

16th January.—Had had trembling attacks daily, most mornings and evenings. Constant headache. No giddiness. Sight normal. Saw "Yellow stars" darting about in front of her eyes occasionally. Felt heavy and sick in the mornings. Sleeping better. Slight nystagmus.

21st January.—Still working. Coarse nystagmus, brought out by exertion. Diplopia following prolonged gaze. Felt drowsy and fatigued. Slight tremor. Knee jerks sluggish. Memory at fault, forgot to lay things on table.

Recovered

The accompanying chart shows the symptoms of most of the cases notified including those which were found subsequently to be suffering from some other complaint.

ENCEPHALITIS LETHARGICA.

Cases Notified 1921—1925.

Year.	Under 1 year		1-5		5-10		10-20		20-30		30-40		40-50		50-60		60-70		70-80		Age not known.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1921	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1
1922	...	...	...	...	...	...	...	...	1	...	...	1	...	...	1	...	...	...	...	...	...	...	2	1
1923	..	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
1924	1	...	2	...	1	1	6	3	1	3	2	4	...	3	4	...	...	...	...	1	...	1	17	16
1925	...	...	...	...	1	...	2	2	...	1	...	1	1	5	...	...	...	4	...	...	...	...	4	13
1921—25 Total	1	...	2	...	2	1	9	5	2	5	2	7	1	8	5	...	...	4	...	1	...	1	24	32

Date of Notification.

	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1921	2	...	...	...	...	...	..	...	..	...	...	...
1922	...	...	...	...	...	...	...	...	1	. .	1	1
1923	...	1	...	...	...	...	...	...	...	...	...	...
1924	...	...	...	...	16	4	1	6	4	...	1	1
1925	2	2	1	1	1	1	...	1	...	2	1	5

TUBERCULOSIS, 1921—1925.

	1921	1922	1923	1924	1925
Pulmonary—					
New Cases Notified	43	57	57	44	52
Number of Deaths	38	41	35	36	29
Deaths of Cases not Notified	11	11	6	5	10
Non-Pulmonary—					
New Cases Notified	11	9	11	21	13
Number of Deaths	7	7	6	13	5
Deaths of Cases not Notified	...	...	3	4	1

The question of Tuberculosis as far as this district is concerned is still unsatisfactory, in that of 29 cases dying last year from tuberculosis, ten were not notified at all. It is still unsatisfactory in that as I have pointed out before, there is some reluctance to send in repeated specimens of sputum for examination. It is the rarest thing for us to receive more than one specimen from any doubtful case. Also, a number of the cases which come home from Sanatoria have to come to conditions which are entirely prejudicial to the maintenance of their improvement.

There is a definite need for an open air recovery school which will deal with convalescent, tubercular, pre-tubercular, and delicate children. I am convinced that money spent in this direction is money wisely expended.

Pulmonary Tuberculosis.

The number of new cases notified during the year was 52. Twenty-four cases (or 46 per cent.) were notified from Institutions :—

Sanatoria 2, Poor Law Institutions 8, General Hospitals 9, Mental Hospitals 2, T.B. Dispensary 3.

Naval and Military cases 0.

Total number of cases admitted to Sanatoria, etc., 47.

Of the new cases notified 37 received Institutional Treatment during the year and 10 died in Institutions.

Other Forms of Tuberculosis.

The number of new cases notified during the year was 13.

Eleven of them were notified as receiving Institutional Treatment.

Ten cases were notified from Institutions.

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Death from Tuberculosis.

Tuberculosis of Respiratory System 29.

(10 were primary notifications and 10 were not notified at all).

Other Tuberculosis 5 (1 was not notified).

TUBERCULOSIS 1925.

Age Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0	...	...	1	...	...	...	...	...
1	...	...	...	2	...	...	...	1
5	1	...	1	1	...	...	...	...
10	1	3	2	1	1	1	1	1
15	3	5	...	1	...	3	...	...
20	5	5	...	...	2	6	2	...
25	3	9	...	3	2	4	...	...
35	6	2	...	1	4	2	...	...
45	3	1	...	...	2	2	...	...
55	3	...	...	...	...	...	...	...
65 and upwards	1	1	...	...	...	...	...	...
Totals ...	26	26	4	9	11	18	3	2

Ten of the deaths from Pulmonary Tuberculosis were not notified and one death from Non-Pulmonary Tuberculosis was not notified.

MATERNITY AND CHILD WELFARE.

MATERNITY AND CHILD WELFARE.

The work is expanding steadily and satisfactorily.

The scheme is as follows—

Two Clinics weekly at the Congregational Hall, Douglas Road, Hounslow.

Two Clinics weekly : at the Public Hall, Isleworth.

At each of these Clinics infant consultations are carried out, regular weighing, and the sale of dried milks, malt, virol, etc.

The Mothers can obtain a cup of tea and a biscuit at a cost of 1d.

The attendances totalled 9843 for the year as compared with 8817 in 1924, 8322 in 1923, and 8398 in 1922.

The average attendance at the Douglas Road Centre was 57.6 and at the Isleworth Centre 39.3.

The number of individual mothers and children attending the Clinics is shewn hereunder :—

	1921	1922	1923	1924	1925
Douglas Road, Hounslow.					
Mothers	538	541	525	530	514
Children	774	726	646	610	608
Isleworth Public Hall.					
Mothers	268	278	270	384	288
Children	296	350	330	489	393

	Quantity	Receipts. £ s. d.
Sales at Clinics.		
Glaxo	5729 lbs.	387 13 7½
Virol	562 lbs.	46 15 0
Malt	306 lbs.	11 8 0
Oil and Malt	626 lbs.	23 8 0
Marylebone Cream	5 lbs 6 ozs.	8 11½
Lactagol	170 pkts.	9 16 0
Almata	339 lbs.	25 8 6
Cow and Gate	1033 lbs.	77 11 2
Cod Liver Oil Emulsion	563 bottles.	18 15 4
Prescription Glaxo	29 lbs.	2 18 0
		£604 2 7

The arrangements with chemists for the dispensing of prescriptions on terms similar to those under the National Insurance Act, have been continued.

The original Clinic at Hounslow was held in the Council House, but the accommodation was so cramped in the waiting room that it was a wonder that so many mothers attended. The new premises in Douglas Road give ample space for everything and the result has been that the average attendance has improved considerably, rising from 35.6 in 1924 to 57.6 in 1925.

The premises at Isleworth are unsatisfactory, in that it is impossible to shut out the noise of the waiting room which is only shut off from the consulting room by a folding wood and glass partition. In addition to this there is frequent trouble with the fire in the winter, making it almost impossible at times to carry on, on account of smoke. The waiting room is not easy to ventilate and becomes oppressively stuffy in Winter time.

The great difficulty in conducting the Clinics, is the shortness of helpers in that there is so much to do with the crowd of mothers that there is no time for the Health Visitors to give talks. An attempt is being made at Douglas Road to institute sewing classes.

In addition to the Infant Consultations, there is an Ante-natal Clinic held twice a month (on the first and third Mondays in each month) at the Council House and the numbers are slowly growing.

There are at present no facilities for dental treatment either for the child under five, or for expectant and nursing mothers. There is no doubt that a large number of the children who present such dirty mouths on examination at school would have been saved this condition if they had been dealt with during the pre-school age, whilst attending the Infant Welfare Clinics. One repeatedly finds that there is a gap in the attendance of certain children who up to the age of about 18 months or so have attended the Clinic very reg-

ularly, and then drop out and are not seen again until they come up for inspection as entrants in the schools, or appear at the School Clinics almost immediately after admission into the schools. On going into the history one is frequently met with the fact that the conditions which are discovered or presented for treatment have arisen some time previously, and could have been dealt with much more effectively in the pre-school age.

Nursery schools of course bridge this gap, but I am afraid that the time is long postponed owing to the financial condition of the country when nursery schools will become general. If something could be done, such as providing dental treatment, which would bring the child during the toddler stage more under the supervision of the Medical Officer, many defects other than dental might be remedied, e.g. cases of nasal obstruction, and/or otorrhoea.

In October, 1924, I suggested that a Consultant Obstetrician should be appointed by the Council to be available for any of the practitioners in case of need. The Maternity and Child Welfare Committee recommended the appointment but it was negatived by the Council in December, 1924.

The difficulties at the present time are great in many families when a confinement is expected. Owing to the housing shortage and the limited accommodation in the newer houses, where in former days a nurse would have come into the house for the confinement, and even from smaller homes where she would not, the mothers are being confined in Maternity Homes both in and out of the district.

Causes of Death under 1 year of age.

	Year.									
	1921		1922		1923		1924		1925	
	Total	Age 4 wks. or under	Total	Age 4 wks. or under	Total	Age 4 wks. or under	Total	Age 4 wks. or under	Total	Age 4 wks. or under
Measles	...	...	2	...	...	...	1	...	...	...
Whooping Cough	1	...	2	...	...	...	...	...	...	...
Diphtheria and Croup ...	1	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis ...	...	...	1	...	...	...	2	...	...	...
Meningitis (not Tuberculous) ...	3	2	3	...	...	...	...	...	...	...
Convulsions	2	1	3	2	3	1	2	...	3	3
Laryngitis	1	...	...	...	...	...	...	...	...	...
Bronchitis	5	...	2	...	1	...	3	1	5	1
Pneumonia (all forms) ...	7	2	6	...	4	...	4	1	6	1
Diarrhoea	3	2	...	...	2	1	1	...	1	...
Enteritis	9	3	7	1	5	1	5	1	10	1
Gastritis	1	...	1	...	1	...	2	1	...	...
Syphilis	...	...	2	1	...	...	...	...	...	...
Suffocation (overlying) ...	1	1	2	2	...	...	...	...	1	...
Injury of Birth	...	...	...	...	4	4	...	...	...	...
Atelectasis	4	4	2	2	...	...	2	2	1	1
Congenital Malformations ...	1	1	4	1	4	1	1	1	3	2
Premature Birth	11	11	18	16	15	12	15	12	12	12
Atrophy, Debility and Marasmus	9	6	4	3	3	...	7	1	14	10
Other Causes	7	5	7	5	4	2	6	3	6	4
Totals ...	66	38	66	33	46	22	51	23	62	35

Total Infant Deaths (1921-1925) ...		291
Deaths occurring within the first four weeks of life...		151
Deaths occurring within the first four weeks of life from Premature Birth, Congenital Malformations, Atrophy, Debility and Marasmus	89	
Stillbirths notified—1921, 32; 1922, 23; 1923, 24; 1924, 22; 1925, 27	128	
	217	

It will be seen from the above figures that practically half the deaths occurring under one year of age occur in the first four weeks of life, and that of these, the majority are under the heading of premature births, these with 128 still births notified make up a total of 217 wasted pregnancies. The misinformed may at once say—so many less mouths to feed, it is nature's limitation of families. True it may mean less mouths to feed but at what cost? In a majority of these cases there is a record of maternal illness, either before or after the birth, much, indeed very much, of which is preventable in various ways. Apart from the actual physical illness that often converts a happy healthy woman into a fretful invalid, there is the phsycological effect in most cases of the bitter disappointment due to the wasted pregnancy or the early loss of the little one, particularly if it is a first pregnancy.

Slowly the necessity for ante-natal supervision is being realised Slowly, all too slowly, the newer conception of the care of the mother at her confinement is being disseminated. Still much propaganda has to be done to counteract the demand on the part of the mothers to ask for instrumental aid early in labour "to get it over."

Still too frequently do mothers appear at the Clinics with a history of a breech presentation and damage to themselves and to the child, nearly all of which could have been avoided by careful ante-natal supervision. The ante-natal work was cut off from the general Maternity and Child Welfare Clinics and a separate ante-natal Clinic commenced.

The work has slowly but steadily progressed and the midwives are more and more sending their cases up for examination. Alongside of this there is a growing practice of being confined in a Hospital, Nursing or Maternity Home, and not in their own home.

Gradually we are realising that conditions of ill health and damage which were regarded as inevitable and normal results of a confinement can be avoided and with the dissemination of know-

ledge women are realising that it is wise to be confined under the best conditions they can afford.

Notification of Births.

Number of live births notified during the year	899
Number of still births notified	27
Notified by Midwives	631
Notified by Parents or Doctors	295

No special measures exist for dealing with unmarried mothers or illegitimate children of such, but cases not wholly destitute have derived benefit through the Council's scheme for grants of food and milk.

VOLUNTARY SOCIETIES AND HELPERS.

The Isleworth Nursing Association and the Osterley, North Hounslow and Heston Nursing Association are the only Voluntary Societies in direct contact with the Council's Maternity and Child Welfare Scheme.

Special mention must be made of the services rendered at the Welfare Clinics by Mrs. Bezer (Co-opted member of the Committee), Miss K. Castell, Mrs. Chadwick, Miss Fry, Mrs, Jotham, Mrs. Schultz and Mrs. Still at the Hounslow Centre, and Mrs. E. Chedgey (Co-opted member of the Committee), Mrs. Evans and Mrs. Watson at Isleworth.

Thanks are also due to the undermentioned for gifts of prams, high chairs, clothing, etc., which are given to other mothers.

Mrs. Templeman, Mrs. Mullins, Mrs. Kingswood, Mrs. Rhodes, Mrs. Gray and several others.

Home Visiting.

The visits by the Health Visitors in connection with the Maternity and Child Welfare Work are shown in the following table :—

	1921	1922	1923	1924	1925
1st visits to babies under one year	1109 ...	913 ...	803 ...	754 ...	888
Re-visits to babies and children up to five years	4484 ...	4241 ...	4150 ...	3594 ...	3562
Inquiries made, elicited—					
Feeding—Natural ...	631 ...	536 ...	516 ...	487 ...	525
Artificial ...	54 ...	43 ...	61 ...	59 ...	104
Both ...	51 ...	41 ...	42 ...	32 ...	56
Sleeping with parents	354 ...	319 ...	282 ...	248 ...	288
Using Comforter ...	236 ...	198 ...	285 ...	236 ...	276
Mother working during pregnancy	45 ...	56 ...	44 ...	37 ...	84

Year 1925.

Ante-natal. First visits ...	57	
Subsequent visits	33	
Infant Deaths. Visits paid	52	
Still Births	—	
Ophthalmia Neonatorum ...	14	
Infantile Diarrhœa	7	
Puerperal Fever	4	
Measles and German Measles	30	Children under 5 years.
Whooping Cough	57	
Mumps	6	
Chicken Pox	11	
Pneumonia	19	
Bronchitis	—	
Milk and Food Cases ...	22	
Home Help	18	
Social Conditions	37	
Milk Samples	—	
Other visits	80	

Health Visitors attendances at the Maternity and Child Welfare Centres, Ante-Natal Clinics, etc., 447.

The Health Visitors also paid 59 visits to Infectious Disease cases, and patients notified as suffering from Tuberculosis, etc.

Home Help for Mothers.

The Home Help paid 100 visits during the year and her work was found of considerable value. She also assists at the Centres when not occupied with her other duties.

One is finding that the demand for a Home Help is not as great as it was some years ago, largely due to the work being undertaken by friendly neighbours.

In addition to her ordinary work, in her unoccupied time she carries out cleansing of unclean heads, under a special scheme. She was trained at one of the London Cleansing Stations, the Council provides the Sacker's combs and the necessary shampoo and towels. A fee of 1/- is charged for each case. By this means, any child who is excluded from school, can be back within two days, and the cleansing is not carried out by any officer of the department acting as such.

There have been certain parents who have objected to going to the Home Help, but a considerable number of parents have been very glad of the opportunity. The presence of this service acts in another way, in that if a case is taken before the Magistrates the fine is considerably heavier now that means are at the disposal of the parents, whereby the child can be re-admitted to school within 48 hours. There is a certain class of parent who rather than face the fact of paying the 1/-, will spend more than that on various medicaments wherewith to cleanse the child's head, and run to the extreme limit of the period allowed by the Committee, and then at the last minute face the fact that it is better to pay 1/- and get the head clean, than run the risk of a substantial fine by the bench.

During the year, 161 children have been cleansed.

Grants of Milk.

Milk is supplied free or at reduced rates to expectant mothers (during last three months of pregnancy) to nursing mothers, and to children under three.

The scale of grants for provision of milk has been fixed as follows :—

Where the family income after deducting rent is less than

4/- per head	free.
4/- to 5/- per head	parent pay $\frac{1}{3}$ cost.
5/- to 7/6 per head	parent pay $\frac{2}{3}$ cost.

Where the amount is over 7/6 per head, no grant is made.

Number of grants made during the year was 93.

Where a case is being dealt with by the Guardians the Committee take the view that the whole case should be dealt with by one Authority, and refuse to make any grant.

Ophthalmia Neonatorum.

Seven children were notified as suffering from this disease. Three were notified from West Middlesex Hospital. All the cases made a complete recovery.

The number of cases is fortunately comparatively few. The numbers notified are really magnified by notifications from the West Middlesex Hospital, which is a Poor Law Institution covering a very wide area outside our own district. There is a difficulty in dealing with these cases which if possible ought to be overcome. that is, that London Hospitals other than Lock Hospitals will not take in the mother and the child, and there is a very real difficulty which those of us who have to set the machinery in motion have to face.

It is true that the worst cases are generally venereal in origin, but there are as is well known, a certain number of cases which are not gonococcal in origin, and yet if a case is notified as Ophthalmia Neonatorum in order to get immediate treatment for the safety

of the child, the stamp "venereal" has to be put on the whole proceeding. This makes it a very difficult matter in certain cases, as both the mother and the father have to be convinced that the mother's admission into the Hospital with her child is the right thing, and if the question of a Lock Hospital comes up it immediately brings in its train suspicions and enquiries which may have no foundation in fact, and if it can be arranged that these cases could be admittel and no question of the venereal possibility be raised until such a time as it is firmly bacteriologically established in Hospital, it would be an immense advantage in many cases. It is so easy to say in a Regulation this and that shall be done, but when it comes to interviewing the young mother in a case that may be due to organisms other than the gonococcus, but which are producing symptoms equally dangerous, it is a very different matter, and those of us who have to do it realise what delicate grounds we are treading on, and how much easier it would be if the restrictions on the admission of such cases were removed.

If after definite determination that a case was venereal in origin it had to be removed to a Lock Hospital, then everyone is on a safe and firm ground and the parents have to bear the brunt of the difficulty they are in, but I feel that this difficulty should if possible be cleared away.

Fortunately there is only one tragedy to record and in that case the child is permanently blind. When I say blind, it has some perception of light as a result of operative interference. Again in the interests of the mother I feel that the action of the Central Midwives Board is not sufficiently drastic. It may seem inhuman to want to imperil a woman's livelihood, but where she by neglect imperils the whole pleasure of living for an individual, and causes sorrow for the family as a whole, then I contend that mere warnings however official they may be do not meet the case. It is urged that they are only dealing with a midwife for breaking a regulation, and that the consequences of that infringement are not the

thing which they are dealing with. I cannot but think that any woman who has been trained as a midwife, and who knows the terrible consequences which may ensue as a result of her neglect, should be penalised and that heavily for neglecting to do what is one of the most important things in her attention at the confinement. After all we are out to safeguard the mother and the child at her confinement. That should be the primary consideration and not the midwife.

OPHTHALMIA NEONATORUM.

Cases.			Vision Unimpaired.	Vision Impaired.	Total Blindness.	Deaths.
Notified.	Treated.					
	At Home.	In Hospital.				
7	3	4	7	...	...	...